# U. S. Department of Education Office of Vocational and Adult Education

# The Carl D. Perkins Career and Technical Education Improvement Act of 2006

## STATE PLAN COVER PAGE

State Name: Missouri

Eligible Agency Submitting Plan on Behalf of State:

Department of Elementary and Secondary Education

| Person at, or representing, the eligible agency responsible for answering questions             |
|---|
| on this plan:   |
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| 1-Year Transition Plan – FY 2007-2008   |
|   |
| Special Features of State Plan Submission (check all that apply):                               |
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| Unified - Postsecondary Only  |
| Title I only (All Title II funds have been consolidated under Title I)  X_ Title I and Title II |
|   |

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# I. PLANNING, COORDINATION, AND COLLABORATION PRIOR TO PLAN SUBMISSION

#### A. Statutory Requirements

1. The eligible agency shall conduct public hearings in the State, after appropriate and sufficient notice, for the purpose of affording all segments of the public and interested organizations and groups (including charter school authorizers and organizers consistent with State law, employers, labor organizations, parents, students, and community organizations), an opportunity to present their views and make recommendations regarding the State Plan. [Sec. 122(a)(3)]

Public recommendations were solicited and collected at six public hearings held across the state, January 28 – February 5, 2008. The sites were Jefferson City, Cape Girardeau, Springfield, St. Charles, Kansas City, and Macon, Mo. Public notice was given beginning October 16, 2007, via announcements on the Department's Web site, announcements in the Division's December and January news bulletins, and a statewide news release issued by the Department of Elementary and Secondary Education on January 9, 2008, announcing the availability of the draft State Plan for advance review, either online or by mail. Notice also was provided to school superintendents and the public in the Department's electronic "Mailbag" on December 12, 2007. Additional effort was made to notify all daily newspapers, doubly those serving locales of the public hearings; education-focused reporters; members of the Missouri Association of Career and Technical Education, Missouri Council of Career and Technical Administrators, Missouri Association of Secondary School Principals, Missouri School Counselor Association, Missouri Special Needs Association, Missouri Council of School Administrators, and Missouri Community College Association; as well as DESE news subscribers. Notice also was posted at the public hearing sites, as well as to the Kansas City Star's Press Release Central.

In addition to six public hearings, a "virtual" public hearing also was made available on the Department's Web site, January 30 through February 15, 2008, which included a recorded presentation, a copy of the draft plan, presentation handouts, and a mechanism for submitting comments and recommendations online.

2. A summary of the above recommendations and the eligible agency's response to such recommendations in the State Plan. [Sec. 122(a)(3)]

Written feedback and recommendations collected from the public hearings and the online submission form were reviewed and considered for modification to the draft State Plan prior to submitting it for consultation by the Governor and approval by the State Board of Education. A summary of the comments and responses to the comments can also be found in Appendix A.

3. The eligible agency shall develop the State Plan in consultation with academic and career and technical education teachers, faculty, and administrators; career guidance and academic counselors; eligible recipients; charter school authorizers and organizers consistent with State law; parents and students; institutions of higher education; the State Tech Prep coordinator and representatives of Tech Prep

consortia (if applicable); entities participating in activities described in Section 111 of Public Law 105-220; interested community members (including parents and community organizations); representatives of special populations; representatives of business and industry (including representatives of small business); and representatives of labor organizations in the State. You also must consult the Governor of the State with respect to development of the State Plan. [Sec. 122(b)(1)(A)-(B)]

The Division consulted with a number of groups and individuals during the development of both the transition plan and the five-year State Plan. The areas targeted for this consultation is listed below, along with a summary of activities related to the targeted areas:

<u>Tech Prep</u> – In August 2007, a letter was sent to all community college presidents from the Assistant Commissioner. The letter requested input as to whether Tech Prep should be consolidated into the basic state grant or if it should be kept separate. Feedback was received until October 1, 2007. In addition to this input, a meeting was held with representatives of the community college presidents to further discuss the future of Tech Prep.

Accountability – Staff from the Accountability and Administration section held three statewide meetings to discuss the proposed accountability measures for Perkins IV. The first meeting was held on October 2, 2007 in conjunction with the Missouri Council of Career and Technical Administrator's fall conference in Columbia. On October 26, 2007, two additional meetings were held in Jefferson City. The first meeting focused on postsecondary accountability measures and was attended by community college staff and other interested educational institutions. The second meeting focused on secondary accountability measures and was mostly attended by comprehensive high school and area career center staff.

In addition to the three meetings, the Division made available a portal on its Web site where interested parties could review the proposed accountability measures and provide written feedback. Feedback was collected through the online portal from October 29 through November 20, 2007.

<u>Programs of Study</u> – The Division hosted a program of study advisory committee on December 17, 2007. The advisory committee was asked to review the work that has been ongoing since April toward development and implementation of programs of study. The advisory committee was representative of community colleges, labor organizations, area career centers, and comprehensive high schools. Staff assigned as career cluster leaders from the Division were also in attendance. The work of the programs of study advisory committee will be ongoing. The advisory committee will continually be consulted as the programs of study process is implemented.

<u>Postsecondary Participation in One-Stop System</u> – The Division sent an e-mail to all postsecondary grant recipients on October 18, 2007. The purpose of the e-mail was to solicit information from postsecondary institutions regarding their participation in the one-stop career center delivery system established by Title I of the Workforce Investment Act (WIA). A number of comments were received and incorporated into the appropriate sections of Missouri's State Plan including comments received by the Division of Workforce Development, the WIA grant recipient for the State of Missouri, which remarked that postsecondary institutions have representation on the local workforce boards.

Special Populations – The Special Population section of the State Plan was written at the state level with the assistance of an advisory committee consisting of vocational resource educators, basic skills instructors, career education evaluators, and work experience coordinators from Area Career Centers around the state. The plan was then sent to the same group with the addition of the Missouri Department of Elementary and Secondary Education, Division of Special Education, Missouri Parents ACT (MPACT), which is a statewide parent training and information center serving all disabilities, Area Career Center directors, postsecondary disability support services coordinators, Missouri Department of Correction, and the Division of Youth Services. All feedback was reviewed and changes were made based on that feedback. A final version was sent to all that participated with the results included in the State Plan submission.

<u>Business and Industry</u> – A broad range of trade associations and professionals representing Missouri business and industry were asked to validate the knowledge and skills for all 16 Career Clusters and 81 Career Pathways through an online survey. Over 700 individuals responded to the online validation process that was operational from November 20, 2006 through January 8, 2007.

In addition, a statewide meeting was held on January 25, 2007 with the Industry Advisory Council representatives of the 16 Career Clusters and most of the 81 Career Pathways. The Industry Advisory Councils reviewed and validated the foundation and pathway knowledge and skill statements; reviewed the results from the online validation process; considered needs and expectations at the middle school, high school, and postsecondary grade levels; identified gaps and overlaps; and explored industry credentials and other certifications.

<u>Consultation with Governor</u> – The State Plan was sent to the Governor's office on March 3, 2008 for consultation.

4. The eligible agency shall develop effective activities and procedures, including access to information needed to use such procedures, to allow the individuals and entities listed in item 3 above to participate in State and local decisions that relate to development of the State Plan. [Sec. 122(b)(2)]

In order to assure that those interested in giving input to the development of the State Plan had knowledge of the plan process, state staff presented information on the plan development process and time lines, a description of work team assignments, and a summary of the major provisions of the Act to local career and technical education administrators, teachers, and organization board members. A draft of the State Plan was placed on the Department's Web site. A document titled, "Perkins Summary and Future Plans for Implementation, FY 2008-2013," was produced, distributed, and presented at the summer conference of the Missouri Association for Career and Technical Education (MoACTE), as well as posted to the Division's Web site. The document provided a brief review of Perkins III and moving forward to Perkins IV. It further described areas of emphasis, funding structure, five-year strategic plan, local annual application, accountability, and programs of study in Perkins IV.

In addition to the communication and consultation received from the activities above, the Division provided a standing feedback page for various issues on its Web site at <a href="http://dese.mo.gov/divcareered/perkins\_iv\_feedback.htm">http://dese.mo.gov/divcareered/perkins\_iv\_feedback.htm</a>.

5. The eligible agency shall develop the portion of the State Plan relating to the amount and uses of any funds proposed to be reserved for adult career and technical education, postsecondary career and technical education, Tech Prep education, and secondary career and technical education after consultation with the State agency responsible for supervision of community colleges, technical institutes, or other 2-year postsecondary institutions primarily engaged in providing postsecondary career and technical education, and the State agency responsible for secondary education. If a State agency finds that a portion of the final State Plan is objectionable, the State agency must file its objections with you. You must respond to any objections you receive in the State Plan that you submit to the Secretary. [Sec. 122(e)(3)]

Missouri has a single State Board of Education that is responsible for all public education, academic and vocational, K-12. The board serves as the state-level governing body for career and technical education programs provided by local school districts, community/technical colleges and four year institutions. The State Board of Education delegates authority to the Division of Career Education for all career and technical education in the state, including secondary, postsecondary, and adult. The Division administers state and federal funds for secondary, postsecondary, and adult career and technical education programs in the state.

On March 3, 2008 the State Plan was sent to the Department of Higher Education for its review and comment.

#### II. PROGRAM ADMINISTRATION

#### A. Statutory Requirements

1. The eligible agency must prepare and submit to the Secretary a State Plan for a 6-year period; or

The eligible agency may prepare and submit a transition plan for the first year of operation of programs under the Act. [Sec. 122(a)(1)]

Missouri is submitting its five-year plan for the Carl D. Perkins Career and Technical Education Improvement Act of 2006, Public Law 109-270. The five-year plan covers Fiscal Years 2009-2013; July 1, 2008 through June 30, 2013.

- 2. Describe the career and technical education activities to be assisted that are designed to meet or exceed the State adjusted levels of performance.
  - (a) Describe the career and technical education programs of study, which may be adopted by local educational agencies and postsecondary institutions to be offered as an option to students (and their parents as appropriate) when planning for and completing future coursework, for career and technical content areas that:
    - (i) incorporate secondary education and postsecondary education elements;
    - (ii) include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education;
    - (iii)may include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits; and
    - (iv)lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree;

During the transition year, Missouri developed a framework and process for secondary and postsecondary education to develop programs of study. The framework includes a full range of activities, documents, and processes that can be incorporated across the state at the local level. Each program of study will include a three-part curriculum framework built around a 4 + 2 (+2) articulation model.

#### Secondary:

- Career and technical education course competency alignment to the Missouri Show-Me Standards and Grade- and Course-Level Expectations.
- Courses meeting postsecondary (both 2-year and 4-year college) entrance requirements appropriate for the career field within the overall program of study.

- Academic and career and technical education foundation knowledge and skills validated by Missouri industry advisory councils.
- Opportunities for students to earn college credit through dual credit/articulated credit.
- Opportunities for students to earn or make documental progress toward an industry-recognized credential or certificate, if appropriate.
- Opportunities for students to engage in leadership development through the appropriate Career and Technical Student Organization (CTSO).
- Work-based learning experiences for students as early as 9th grade, and where appropriate.

#### Postsecondary:

- Alignment and/or articulation of competencies between appropriate secondary programs.
- Alignment and/or articulation of competencies between one-year certificate, two-year degree, and four-year degree programs.
- Alignment with industry-recognized knowledge and skills, which leads to a certificate, credential, two-year or four-year degree.
- Preparation for employment in high-skill, high-wage, and/or high-demand careers with multiple exit points.

#### Business and Industry:

- Work-based learning experiences for students as early as 9th grade, and where appropriate.
- Business and industry participation in an advisory capacity.
- Provides ongoing support for the programs of study, such as teacher mentoring for industry-specific knowledge, assisting with student projects, and relevant experiences that are based upon all aspects of the industry.

In addition to the above criteria, each eligible recipient will show evidence of the following in developing at least one program of study that includes:

- Collaborative efforts with secondary, postsecondary, and business/industry in preparing a gap analysis between course/program outcomes or competencies and industry-recognized knowledge and skills.
- Steps taken to address any gaps found.
- Comprehensive student career guidance and counseling.
- Development of a culture focused on continuous improvement by:
  - Collecting qualitative and quantitative data on academic and career success, retention rates, dropouts, graduation, transition, and remediation;
  - Using data for planning and decision-making at all levels;
  - Providing high-quality professional development for faculty, administrators, and counselors to improve teaching/learning and integration of technical and academic instruction for improved student achievement; and
  - Maintaining ongoing dialogue among secondary, postsecondary, business, and parent partners at the state and local levels.
    - (b) Describe how the eligible agency, in consultation with eligible recipients, how the state will develop and implement the career and technical programs of study described in (a) above;

The Division of Career Education began developing programs of study in September 2006. The programs of study will be designed around the 16 Career Clusters as defined by the States' Career Clusters Initiative. Division of Career Education staff members have been designated as state Career Cluster leaders.

#### Major steps for development:

- A broad range of trade associations and professionals representing Missouri business and industry were asked to validate the knowledge and skills for all 16 Career Clusters and 81 Career Pathways through an online survey. Over 700 individuals responded to the online validation process that was operational from November 20, 2006 through January 8, 2007.
- A statewide meeting was held on January 25, 2007 with the Industry Advisory Council representatives of the 16 Career Clusters and most of the 81 Career Pathways. The Industry Advisory Councils reviewed and validated the foundation and pathway knowledge and skill statements; reviewed the results from the online validation process; considered needs and expectations at the middle school, high school, and postsecondary grade levels; identified gaps and overlaps; and explored industry credentials and other certifications.
- Based on the feedback from the Industry Advisory Councils and Career Cluster leaders, the Missouri Center for Career Education (MCCE—see page 27) and local educator advisory councils conducted a pilot process to align the Career Cluster foundation and pathway knowledge and skill statements with local education agencies' competencies. This pilot was done with one pathway from Agriculture, Food and Natural Resources, and Health Science. Involved in the pilot was a comprehensive high school, area career center, community college, and a four-year university. The end result was the identification of a ten-step program of study development and implementation process. The process addressed alignment of existing courses/programs (content) within the context of Career Clusters and Pathways and documented steps involved in the development process. As part of the pilot study, the process also allowed for the testing of tools (software) that could be utilized by sites as they begin the implementation process.

The review of the pilot process and example programs of study were presented at the following conferences and professional development events:

- Missouri Association for Career and Technical Education (MoACTE) Summer Conference
- Missouri Council of Career and Technical Administrators (MCCTA)/Missouri Association of Secondary School Principals (MASSP) Fall Conference
- Building Bridges Conference that includes Tech Prep, High Schools That Work, and A+ Schools
- Missouri School Counselors Association (MSCA) Fall Conference
- Tech Prep consortium meetings
- Missouri Council of Career and Technical Administrators Spring Conference 2008
- Other appropriate program-specific statewide and regional fall conferences

Because programs of study development and implementation closely resemble the original intent of Tech Prep, the decision was made to utilize the 15 Tech Prep coordinators as facilitators of programs of study development and implementation. The Division commissioned MCCE to develop an

extensive plan for the training of the Tech Prep coordinators in their new role as programs of study facilitators.

In the fall of 2007, MCCE began training the Tech Prep coordinators in the nuances of programs of study development and implementation. The training included information on Career Clusters, rigor and relevance, the Perkins Act, the program of study pilot project, and curriculum design and development. Development of modules related to Career Clusters and rigor and relevance was done as an approach for this work.

A program of study advisory committee was formed. The advisory committee, consisting of secondary and postsecondary representatives and Division Career Cluster leaders, met on December 17, 2007 to provide overall guidance to the process.

In January 2008, the Tech Prep coordinators began developing the additional five pilot programs of study. These pilots are taking place across the state in different clusters. Each pilot site is coordinated by a team of Tech Prep coordinators who will share and document that experience.

Once the pilots are completed in April 2008, the Tech Prep coordinators will compile their experiences and integrate them into a final version for the programs of study implementation process in Missouri. Presentations of this process will be conducted at the MoACTE's summer conference in July.

In September 2008, the 15 Tech Prep coordinators will begin individual programs of study development and implementation processes in their own consortiums under the guidance of the programs of study advisory council.

(c) Describe how the eligible agency will support eligible recipients in developing and implementing articulation agreements between secondary education and postsecondary education institutions.

Over the last several years, comprehensive high schools, area career centers, and community colleges established articulation agreements to assist students in continuing their education. All secondary career education programs are required to have at least one articulation agreement/dual credit arrangement with a postsecondary institution. This is emphasized as part of the Missouri School Improvement Program (MSIP), which is the accreditation process for all public school districts in Missouri. Articulation agreements provide a systematic, seamless student transition process from secondary to postsecondary (community colleges) education that maximizes the use of resources and minimizes content duplication.

Traditionally, the emphasis with articulation agreements has been to provide students with as many hours of college credit as possible. The articulation agreements for the same program have varied from one postsecondary institution to another. For instance, the number of hours of credit given, the criteria for awarding the credit, and when students receive the credit for a particular program may be 15 hours at one postsecondary institution and 30 hours at another. Therefore, it was suggested by both secondary and postsecondary career education administrators that criteria be established for statewide articulation agreements that demonstrates what students need to know and are able to do.

Advisory committees were established in 2005-2006 with secondary and postsecondary instructors, community college admissions representatives, community college presidents, and the Missouri Department of Higher Education to determine criteria for statewide articulation agreements. The groups determined that the best course of action is to start with the career education programs that have a national certification/credential which include program competencies and end-of-course/program assessments. The goal in establishing the statewide articulation agreements is to set a minimum number of credits that would be granted to a student rather then trying to establish a maximum amount of credit.

Statewide articulation agreements have been developed and approved by the State Board of Education. These articulation agreements are:

- Automotive Technology programs accredited by the National Automotive Technology Education Foundation (NATEF)/Automotive Service Excellence (ASE)
- Cisco Networking Academy programs that participate in the Cisco Networking Academy
- Construction/Carpentry/Building Trades programs accredited by the Associated General Contractors (AGC) of America or National Center for Construction Education and Research (NCCER)
- Culinary Arts/Hospitality programs accredited by the American Culinary Federation (ACF) or National Restaurant Association Education Foundation (NRAEF) ProStart®
- Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC-R) programs accredited by the Partnership for Air Conditioning, Heating, Refrigeration Accreditation (PAHRA) or HVAC Excellence
- Welding programs accredited by the American Welding Society (AWS) Schools Excelling through National Skills Education (SENSE)

In addition to these statewide articulation agreements, additional program areas that have some type of national certification or accreditation are being pursued, such as Childcare and Graphic Arts/Communications.

# (d) Describe how programs at the secondary level will make available information about career and technical programs of study offered by eligible recipients.

In conjunction with MCCE, the Division of Career Education will develop the process for local development of programs of study. This process will then be transferred to the local level through a number of professional development opportunities wherein eligible recipients become familiar with programs of study and the strategies for implementation. These professional development opportunities include, but are not limited to:

- The annual summer conference of the MoACTE, in which presentations on the programs of study will be conducted by Division staff at their individual professional organization meetings.
- The Division, in conjunction with MCCE and the Oklahoma Department of Career and Technology Education, has collaborated to develop components of a Career Clusters toolkit. The purpose of the toolkit is to familiarize teachers, counselors, and administrators with Career Clusters and provide them with strategies for implementation.

- Guidance and Placement Services staff from the Division will include programs of study as part of the regional guidance in-service meetings that are conducted in the fall of the school year.
- The Comprehensive Guidance Program includes individual planning as part of its delivery system. The individual planning process is focused around students making a "personal plan of study" that is focused on a Career Path and/or Career Cluster. The programs of study will be used as the guide for developing each student's personal plan of study.
- Schools will be encouraged to include sample programs of study as a part of their course guides that are developed each year as part of the registration process.
- A special section featuring the sample personal plans of study will be made readily available to students, school counselors, and parents on Department-sponsored Web sites.
- Teacher and counselor educators will be a part of the development of the sample programs of study. However, in order to get the concept out on a broader scale, a special in-service will be held to inform them of the transition to programs of study. Time will be spent during the inservice to discuss strategies to incorporate programs of study in their work with students.
- Professional development and technical assistance provided by MCCE on programs of study implementation.
  - (e) Describe the secondary and postsecondary career and technical education programs to be carried out, including programs that will be carried out by the eligible agency, to develop, improve, and expand access to appropriate technology in career and technical education programs.

The Missouri career education system provides statewide local delivery of services through 12 community college service regions (which in some cases may include multiple community college campuses), 58 area career centers, 1 state technical college, 7 four-year universities offering two-year associate degree programs, and 443 comprehensive high schools. In addition, the system includes two state agencies—the Department of Corrections and the Department of Social Services, Division of Youth Services.

Career education programs operated by local educational agencies (LEAs) that receive state and/or federal funds are approved by the Department of Elementary and Secondary Education. Local educational agencies are required to submit program applications based on the *Application for Approval of Career Education Programs – Secondary/Adult Only*, (http://dese.mo.gov/divcareered/documents/MCE\_Secondary\_and\_Adult\_New\_Program\_Application.pdf), Postsecondary program applications, (http://dese.mo.gov/divcareered/documents/MCE\_PS\_Program\_Approval\_Form.pdf), are first approved by the Department of Higher Education, then reviewed by the Department of Elementary and Secondary Education for final approval to be eligible for Perkins funding. These LEAs deliver career education instruction in the following six program areas:

1. <u>Agricultural Education</u> – Agricultural Education prepares secondary, postsecondary, and adult students for a variety of careers and advanced college or technical training in the Agriculture, Food and Natural Resources System. Career opportunities for students range from positions in agribusiness, food science, agricultural mechanics and technology, plant science and horticulture, animal science, and natural resources conservation. Programs are delivered by the following: four-year "cluster" programs at comprehensive high schools and area career centers;

- two-year community college "specific" programs; and "supplemental" and "specific" adult education in high schools, area career centers, and community colleges.
- 2. <u>Business Education</u> Business Education is a vital part of our American educational system and has provided a solid foundation of knowledge and skills for over a century. Business Education is education *for* and *about* business. Education *about* business means preparing all learners for the various roles they will play as economically-literate citizens. Education *for* business means building on these general understandings about business in a way that prepares learners to be employed in a variety of careers. These two major thrusts continue as essential components in all business education environments and enable individuals to:
  - participate in a global economic system;
  - function in domestic and international business environments that are characterized by diversity;
  - develop information technology skills for creating and managing information and making decisions; and
  - integrate business concepts and skills with other academic knowledge.
- 3. Family and Consumer Sciences Education Family and Consumer Sciences Education (FCS) is a vital part of a quality comprehensive career education program. The program prepares students for essential employment and balancing work and family responsibilities. Included in the first piece of vocational legislation, the Smith Hughes Act of 1917, Family and Consumer Sciences is concerned with the work of the family—the recurring, practical problems of home and family and preparing students for work. The critical elements of study, family, human development, interpersonal relationships, parenting, nutrition and wellness, and family and consumer resources are appropriate for all students. Family and Consumer Sciences Education contributes significantly to the preparation of workers in nearly one-third of the occupations in Missouri. Students can prepare for virtually hundreds of current and emerging careers in fields such as dietetics, interior design, hospitality, fashion, food service, education, consumer services, and family and children services.
- 4. Health Sciences The comprehensive Health Sciences program seeks to meet present and predicted needs for health care workers within a health care delivery system characterized by diversity and changing technologies. It is a program that recruits qualified and motivated students and prepares them for pursuit of appropriate health careers. Based on natural and social sciences, the humanities, and a researched body of knowledge, the curriculum is designed to offer a foundation of knowledge and skills necessary to health career preparation. Curriculum concepts incorporate technological advances related to the health care delivery system, including ethics, professionalism, prevention (wellness), patient/client diagnosis, treatment, care, and rehabilitation as a result of disease/disorders. Teaching/learning strategies integrate appropriate workplace basic skills that assist students to use resources and technologies, function as effective members within a complex system, and to access and use appropriate information/data. Guiding students to make relevant connections between abstract theories and concrete applications is emphasized throughout the curriculum. This is especially practiced through team teaching with health professionals and on-site practicum experiences (mentorship/internships).

5. <u>Marketing and Cooperative Education</u> – Marketing Education curriculum provides the framework for implementation of marketing and business concepts for the future entrepreneur, retailer, event planner, banker, physician, lawyer, and sales professional. Whether a student has aspirations of entering a career upon high school graduation or is intent on seeking an Associate Degree, Bachelors Degree, or maybe even an MBA, the skill set gained as a result of mastering the curriculum will be a key ingredient to a successful career.

Cooperative Career Education programs are designed to equip students with the essential skills for career planning and advancement. Participants in this program may have a cross-section of career interests; however, there are strategies common to all occupations regarding career planning and advancement. Full group, small group, and individualized instructional strategies are utilized to assist students in mastering both occupationally-specific and career development competencies.

6. <u>Trade and Industrial Education</u> – Trade and Industrial Education programs are designed to prepare secondary and postsecondary students for rewarding careers in high-demand, high-wage careers. Instruction is also offered through short-term adult education programs to meet the needs of local labor markets. Trade and industrial students participate in instructional units that educate them in standardized industry processes related to: concepts; layout; design; materials; production; assembly; quality control; maintenance; troubleshooting; construction; repair and service of industrial, commercial, and residential goods and products.

Trade and Industrial Education provides students with opportunities for advancement in a wide range of trade and industrial occupations. Completers are prepared for initial employment, further education at the community college, university, apprenticeship program, trade school, military, and/or business ownership. Career options include: commercial and artistic design and production, computer maintenance and networking, construction, cosmetology, culinary arts, engineering, industrial, public service/law enforcement, and transportation systems technologies.

A balanced program of classroom study and practical work experiences produces competent workers who can manage resources, work cooperatively, organize and use information, understand complex systems, and apply appropriate technology. Cooperative education, internship, and apprenticeship experiences are available to students to support learning through the Trade and Industrial Education program.

Additional programs that support the development, improvement, and expansion of student skills in Missouri in career education are:

• <u>Technology Education</u> – Technology Education is the school subject that teaches about the processes used to design, create, and maintain the human-made world. Technological studies, design, innovation, and pre-engineering are other terms used to describe this subject area. The overarching mission of Technology Education as a school program is to develop the human potential of all students for responsible work, citizenship, and leisure roles in a technological

society. To accomplish this, programs must address each of its three primary missions, namely to develop each person's:

- ability to comprehend and apply the concepts of technological systems;
- values and attitudes related to the appropriate use of technology—its tools, machines, materials, processes, and products; and
- ability to use materials, technological processes, and hardware to achieve constructive work skills and enhance occupational opportunity.

Technology Education draws its content from the entire range of technological endeavors, not just industry. Content is also selected by identifying the competencies individuals need to effectively use the products of a technological society. The educational program known as Technology Education derives its content, i.e. the subject matter it teaches, from technology, and not just industry. It is considered to be a body of knowledge or a discipline.

- <u>Project Lead the Way®</u> Project Lead the Way® (PLTW) is a sequence of courses, combined with traditional college-preparatory mathematics and science courses. It introduces students to the scope, rigor, and discipline of engineering prior to their postsecondary experiences. The program merges academic theory with skills application, critical thinking, and problem-solving resulting in high student performance.
- <u>PLTW Biomedical Sciences Program</u> The PLTW Biomedical Sciences Program consists of a sequence of four courses: Principles of the Biomedical Sciences, Human Body Systems, Medical Intervention, and Scientific Research. The goal of the program is to provide rigorous and relevant curriculum that is project- and problem-based in order to engage and prepare high school students for the postsecondary education and training necessary for success in the wide variety of careers associated with the Biomedical Sciences including physician, nurse, veterinarian, scientific and pharmaceutical researcher, therapist, and technician.

Missouri is partnering with Oklahoma, Maryland, Indiana, South Carolina, Connecticut, and Ohio to develop the PLTW Biomedical Science Program. The state is using its incentive grant funding to support this initiative. Five Missouri high schools are piloting the program in 2007-2008.

- Missouri Virtual Instructional Program Beginning with the 2007-2008 school year, students in Missouri's public, private, and home schools have coursework available through the Missouri Virtual Instructional Program (MoVIP). MoVIP offers online courses to students 24 hours a day, 7 days a week. Three courses in career and technical education are being offered during the first year of implementation: Nutrition and Wellness (FCS), Web Design (Business Education), and Personal Finance (Business Education or FCS). Additional career and technical education courses will be offered in subsequent years. A complete list of courses being offered through MoVIP can be found at <a href="http://www.dese.mo.gov/divimprove/curriculum/movip/index.html">http://www.dese.mo.gov/divimprove/curriculum/movip/index.html</a>.
- <u>Cisco Networking Academies</u> The Cisco Networking Academy Program is a comprehensive e-learning program that provides students with the Internet technology skills essential in a

global economy. The Networking Academy delivers Web-based content, online assessment, student performance tracking, hands-on labs, instructor training and support, and preparation for industry standard certifications. Missouri currently has 5 regional academies and 54 local academies.

• <u>ProStart®</u> – The ProStart program teaches both culinary essentials and basic foodservice management skills, preparing students to fill the need for skilled managers within the hospitality industry. Students gain a broad range of industry skills and experience to prepare them to enter the job market directly after high school or to continue to postsecondary education. Through this two-year program, students learn through classroom experiences, as well as through participation in internships with qualified foodservice operations and mentors.

ProStart is overseen by a coordinator employed by the Missouri Restaurant Association in cooperation with the Division of Career Education. The coordinator recruits new schools into the program, plans and provides in-service for instructors, and provides ongoing technical assistance, as needed. In the fall of 2007, 2,499 students were enrolled in the program, representing 71 schools.

- <u>Automotive Youth Educational Systems</u> Automotive Youth Educational Systems (AYES) is a partnership among participating automotive manufacturers, participating dealers, and selected high schools and area career centers. It is designed to encourage young people to consider careers in retail automotive service and to prepare them for entry-level career positions or advanced studies in automotive technology.
- Melior Developed by Melior, the Web-based automotive technology curriculum is designed for local career education programs. The program supports an instructor's curriculum with self-paced textual resources, interactive visual exercises, and incremental quizzes and tests. These modules include all of the basic concepts to provide a solid foundation for ensuing laboratory work and practice. The online material can be accessed by the student on a 24/7 basis. Instructional content supports Automotive Service Excellence (ASE) certification for students.

There are two state funding sources to provide equipment for secondary and postsecondary programs to upgrade and enhance technology in the classrooms:

- Vocational-Technical Education Enhancement Grant Funds made available through this grant focus on the initiation of new, and the improvement of, existing occupational preparatory career education programs, curriculum enhancement, instructional equipment and facility improvement, particularly in high-demand occupations. The goal is to expand and enhance the quality of Missouri's occupational preparatory (long-term) career education programs through the improved alignment with business and industry occupational training needs and increase emphasis on training in occupations that have been determined to be in critical shortage.
- <u>50/50 Equipment</u> A small amount of match money will be available to eligible recipients to purchase new equipment and upgrade existing equipment so that the training equipment used in career education programs closely mirrors that of the equipment used in business and industry.

All public school districts in Missouri are required to have a state-approved technology plan. This plan must be tied to school improvement plans and address all five Technology Focus Areas (TFAs): student learning; teacher preparation; administration, data management, communications; resource distribution; and technical support. The plan must include district participation in the e-rate program and participation in projects of the Missouri Research and Education Network (MOREnet), which provides Internet connectivity; access to Internet2; technical support; videoconferencing services and training to Missouri's K-12 schools, colleges and universities, public libraries, health care, state government, and other affiliated organizations. The district technology plan requirement aligns with the required uses of funds as per Section 135(4)(A)(B).

- (f) Describe the criteria that the eligible agency will use to approve eligible recipients for funds under the Act, including criteria to assess the extent to which the local plan will:
  - i. Promote continuous improvement in academic achievement;
  - ii. Promote continuous improvement of technical skill attainment; and
  - iii. Identify and address current or emerging occupational opportunities.

The Division will develop a local application that eligible recipients can use when preparing their local five-year plan for submission and approval by the State. The local plan will address all items listed in the Carl D. Perkins Career and Technical Education Improvement Act of 2006 under Section 134(b)(1)-(12). Special emphasis will be placed on the implementation of at least one program of study and the focus on integration of academic and career and technical education. A scoring rubric will be developed that will serve as a guide to review and approve local plans.

In subsequent years, each eligible recipient will be required to submit a local application. The local application will include an improvement plan for each performance indicator that was not within 90% of the final agreed-upon level of performance, a description of how the funds will be used to address those items in the improvement plan, and a detailed budget summary.

The Department of Elementary and Secondary Education is in the process of developing a Department-wide grant application system known as the Missouri electronic Planning and electronic Grant System

(ePeGS) which will include the Perkins grant. The purpose of this project is to create a seamless planning and e-grants process for school districts, other educational institutions, and the Department so there is a comprehensive plan and consistent application process to provide information for budgets and school improvement planning. The goals of the project include:

- a cross-divisional planning process that meets State and Federal requirements and
- a consolidated grant application process that integrates with the planning process to ensure the budget supports the plan and integrates with the allocation and payment of funds.
  - (g) Describe how programs at the secondary level will prepare career and technical education students, including special populations, to graduate from secondary school with a diploma.

As described in (e) on pages 13-18 of this document, Missouri offers a wide range of secondary career education programs in 443 comprehensive high schools and 58 area career centers. Career and technical education is an integral part of the educational program in all of these schools. This is determined by the standards set forth in the MSIP, the state's school accreditation program.

In addition to the standards and indicators in the MSIP, the *Common Standards for Career Education Programs* (http://dese.mo.gov/divcareered/Common\_Program\_Standards.pdf) were developed during Fiscal Year 2006 with input from teachers and administrators. The standards and indicators are designed to provide guidance and direction to local school districts in establishing, improving, and evaluating career education programs.

As part of the MSIP process, the Division of Career Education requires all career education programs to complete the *Self-Monitoring Report for Career Education* (http://dese.mo.gov/divcareered/MSIP/MSIP\_Revised\_Short\_Report\_9-07.doc). The *Self-Monitoring Report for Career Education* serves as a tool for school districts to use for program improvement and planning. Aligned with the *Common Standards for Career Education Programs*, the report is used to review local career education programs to determine where standards are being met and where improvements should be made. Findings from the report are used in the district's Comprehensive School Improvement Plan (CSIP) for career education program improvement.

Beginning with the graduating class of 2010, the minimum number of credits for graduation will be 24, up from 22 units. The new graduation requirements place more emphasis on core academic areas. The increased requirements were made by the State Board of Education in response to concerns expressed by both the business community and higher education about the lack of adequate preparation of Missouri's high school graduates for either the workplace or postsecondary education.

Some of the programs and practices currently in place to assist in preparing career and technical education students to graduate from a secondary school with a diploma include:

#### • Curriculum

All career education programs are expected to have a curriculum guide for each course that is offered by the school district. Each written curriculum guide should include the following components:

- Rationale
- Course description
- Graduate goals
- Measurable learner objectives
- Instructional activities
- Assessments (including performance-based assessments)
- Alignment to Missouri Show-Me Standards and Grade-Level Expectations (GLEs)
- Approval by the local board of education

#### • Competency Profiles

Competency profiles have been developed by the Division of Career Education and MCCE for virtually all career education programs and courses. Each profile was developed with input from practicing career educators and related business and industry representatives. The competency profiles have measurable learner objectives (MLOs) and task statements for career educators to use as a guide to develop their local curriculum. Most of the competencies have been aligned with the Missouri Show-Me Standards, as well as any applicable national standards. The State anticipates that many of the competency profiles will be revised to reflect the development of programs of study. Additional competency profiles may need to be developed for new courses.

Missouri competency profiles and their corresponding crosswalk document, where available, can be found at <a href="http://missouricareereducation.org/curr/comppro.html">http://missouricareereducation.org/curr/comppro.html</a>.

#### • Embedded Credit

Embedded credit has recently become more widely recognized as a way for students to complete a rigorous core of both academic and technical coursework. In addition, embedded credit offers an efficient solution for schools and students to meet the increased graduation requirements.

There are two objectives for implementing embedded credit:

- ensure Missouri students have continued opportunities to take a rigorous academic core and career and technical education course(s), and
- prepare students for college and a career by improving their academic achievement and reducing the dropout rate.

These two objectives are specifically relevant to the accountability requirements of the MSIP and Perkins.

In order to assist Missouri schools with creating embedded credit opportunities for students, an Embedded Credit Toolkit is available. The toolkit, developed by MCCE, documents the practices and observations of those who have been involved in embedded credit to date. The toolkit is intended to save educators time during the steep learning curve from exploration to implementation. The toolkit is available at

http://missouricareereducation.org/curr/cmd/adminG/EmbeddedCredit/index.html.

Beginning in July 2007, MCCE initiated activities to further support embedded credit as an alternative to traditional methods of earning/awarding high school credit. Since developing the Embedded Credit Toolkit, a number of additional embedded credit models have evolved, refinements have been made in the Department's application and documentation processes, and other strategies and tips for successful implementation have been identified. The Missouri Center for Career Education will document and incorporate these developments into an updated version of the original toolkit.

Performance expectations are integral to effective embedded credit practice and assessment of student mastery is an essential measure of accountability, not only for the benefit of the embedded credit program but for participating schools and the students they serve. Because assessment is recognized as a significant component to the process but was not addressed originally, a section pertaining to the development of performance expectations and student assessment will also be included in the updated toolkit.

It has become evident in recent months that the first steps in implementing embedded credit courses are, in many instances, the most difficult. Development and effective implementation depend heavily on early and extensive communications among all parties involved. To facilitate initial collaboration, MCCE will provide technical assistance to aid school districts that are pursuing embedded credit options. Assistance will be designed to address how to begin conversations; maintain open, collaborative dialogue; address challenging questions and concerns; as well as other topics necessary to support embedded credit success.

#### Programs of Study and Personal Plans of Study

A requirement of Perkins IV is that school districts will create programs of study which will include a non-duplicative sequence of academic and technical education instruction, comprehensive career guidance and counseling, linkages to postsecondary opportunities, and workplace learning opportunities, among others.

Students will have the opportunity to build their own personal plan of study, the foundation of which will be the program of study, if available, within their identified Career Cluster. This will be accomplished through the Individual Planning Process of a school's comprehensive Guidance Program. The personal plan of study will reflect the coursework needed to complete the program of study including state and local graduation requirements, grade appropriate work-based opportunities, and relevant co-curricular activities in which the students will engage. Such activities may include, but are not limited to, job shadowing, service-learning,

internships, volunteer activities, after school employment, and career and technical student organization activities. The personal plan of study will further reflect the postsecondary goals of the student which will be reviewed annually and revised, as necessary. The MSIP requires that all students have a personal plan of study built around a Career Path and/or Cluster beginning no later than the end of 8th grade.

The Guidance and Placement Services section of the Division of Career Education will focus professional development activities on how schools can improve and strengthen the individual planning process so that meaningful yet rigorous personal plans of study are developed.

#### • Career and Technical Student Organizations

Career and Technical Student Organizations (CTSOs) are an integral part of career and technical education. Ten secondary, postsecondary, and adult career and technical student organizations exist and are supported within Missouri. More than 75,000 students participate annually in Missouri CTSOs. Students are provided with leadership development opportunities relating to their career interests. Such leadership and career development includes: co-curricular instruction and application of program curricula to individual and group activities/projects; local/district/regional/state/national leadership conferences and workshops; competitive/skill events; community service opportunities; and individual or group recognition activities involving problem-solving and team work. Special populations and nontraditional students are encouraged to participate in these leadership organizations.

#### Missouri Option Program

The Missouri Option Program is designed to target students who have the capabilities to complete Missouri high school graduation requirements, but for a variety of reasons lack the credits needed to graduate with their class and are at risk of leaving school without a high school diploma. The Missouri Option Program specifically targets those students who are 17 years of age or older and are at least one year behind their cohort group or for other significant reasons identified in the local Missouri Option Program plan. School districts approved by the Department of Elementary and Secondary Education to participate in the Missouri Option Program can continue to receive average daily attendance funds for the participating students. Additionally, students will remain in school and are not counted as dropouts. Once the school district issues a diploma, participants are then counted as high school graduates. Information on the Missouri Option Program can be found at <a href="http://dese.mo.gov/divcareered/Missouri">http://dese.mo.gov/divcareered/Missouri</a> option.htm.

#### • Career Education Area Technical Learning Centers

The Career Education Area Technical Learning Centers program assists local educational agencies (LEAs) in developing, implementing, and operating programs designed to prevent students from leaving school without a diploma and to encourage those who have left early to return and complete their education. The Career Education Area Technical Learning Centers program specifically targets special population students as identified in the Act, with emphasis on those students that are one-half or one full credit behind their cohort group. The program includes career awareness activities and the opportunity for enrollment into a career skill training program.

Activities that may be provided for individuals include counseling services to assist students in making decisions and adjustments that allow them to reach their full potential. Students are helped to identify careers that most appropriately fit their interests and abilities. Instruction is provided in:

- workplace readiness;
- assessment that includes evaluation of prior and current skills, knowledge, and interests through educational and occupational assessments; and
- basic skills instruction through the use of applied curriculum materials and individualized instruction.

#### • Career Prep Certificate Program

Missouri schools strive to develop in students the knowledge, skills, and attitudes necessary for a successful and productive career. Part of a successful career is to have skills necessary to succeed in the workforce and to meet employer expectations. To assist in meeting those expectations, the Missouri General Assembly passed Senate Bill 894 during the 2006 session.

This legislation charged the Department of Elementary and Secondary Education to develop a voluntary program that enables high schools to endorse a certificate for students who meet certain standards demonstrating that the students are "ready to work." The Career Preparation Certificate Program is designed for high school seniors who choose to participate. In developing the program, the Department established a statewide advisory committee. It was comprised of representatives from employers, chambers of commerce, local workforce service providers and postsecondary institutions, as well as school administrators, counselors, and students. The group was charged with developing the following program components:

- academic components;
- work readiness components;
- assessment tools and techniques for a third party, independent, and objective assessment and endorsement of individual student achievement through an existing workforce investment service delivery system; and
- an easily identifiable guarantee to potential employers that the entry-level employee is ready to work.

The group met monthly to develop the program components, utilizing Web conferencing technology for five of the meetings. Additional guests also participated in meetings by presenting and lending their expertise to planning efforts. From the direction of the advisory committee, a planning guide was developed to assist with local implementation of a Career Prep Certificate Program. The guide provides a framework for communities, large or small, to design a program that meets the needs of their employers. It provides guidance for successful coordination of programs and initiatives that can be packaged into a meaningful certificate. http://dese.mo.gov/divcareered/career\_prep\_certificate/CPC\_Planning\_Guide.pdf.

#### • Missouri Virtual Instructional Program

Beginning with the 2007-2008 school year, students in Missouri's public, private, and home schools have coursework available through the Missouri Virtual Instructional Program

(MoVIP). MoVIP offers online courses to students 24 hours a day, 7 days a week. Three courses in career and technical education are being offered during the first year of implementation: Nutrition and Wellness (FCS), Web Design (Business Education), and Personal Finance (Business Education or FCS). Additional career and technical education courses will be offered in subsequent years. A complete list of courses being offered through MoVIP can be found at <a href="http://www.dese.mo.gov/divimprove/curriculum/movip/index.html">http://www.dese.mo.gov/divimprove/curriculum/movip/index.html</a>.

(h) Describe how programs at the secondary level will prepare career and technical education students, including special populations, academically and technically for opportunities in postsecondary education or entry in high-skill, high-wage, or high-demand occupations in current or emerging occupations, and how participating students will be made aware of such opportunities;

In addition to the programs and services described in (g) on pages 19-23, the following programs and services will be made available or are in the process of development:

#### • Comprehensive Guidance Program

The Comprehensive Guidance Program provides a framework designed to assist students in acquiring and using life-long learning skills through the development of academic, career, and personal/social skills. It is developmental by design and includes sequential activities organized and implemented by certified school counselors, with the active support of teachers, administrators, students, and parents. The Comprehensive Guidance Program is designed to serve all students in grades K-14.

One of the purposes of the Comprehensive Guidance Program is to assist students in making informed educational and career decisions through a process called "Individual Planning." Guidance programs in Missouri provide the resources and materials needed to ensure this process unfolds in a systematic manner with particular emphasis given to individual planning at the secondary level.

The Guidance and Placement Services section of the Missouri Department of Elementary and Secondary Education provides a uniform, yet flexible model for Comprehensive Guidance Programs in comprehensive high schools and area career centers. The components of the programs focus on student attainment of knowledge and skills to help ensure a successful transition to a postsecondary experience and provide for accountability and program improvement.

• Articulation Agreements/Dual Credit Arrangements
See page 12 for approved list.

#### • Industry Certifications

Industry certifications are a part of the curriculum at both the secondary and postsecondary levels. These industry certifications include, but are not limited to:

- American Welding Society (AWS)
- Associated General Contractors (AGC)

- Automotive Service Excellence/National Automotive Technician Education Foundation (ASE/NATEF)
- Child Development Associate (CDA)
- Cisco Networking Academy
- Heating, Venting, Air Conditioning (HVAC) Excellence
- Microsoft Office Specialist (MOS)
- National Restaurant Association Education Foundation's (NRAEF) ProStart and ServSafe<sup>TM</sup>

These certifications at both the program level and student level provide some assurances that students are being taught to industry standards, and those who receive individual certifications are prepared to enter the workforce with a standard set of skills.

#### • Missouri Connections

Missouri Connections.org currently is an educational and career planning information system for students in grades 6 through 14. It is sponsored and guided by the Department of Elementary and Secondary Education in collaboration with several partners interested in helping students make meaningful connections with education, career preparation, and employment demand, thereby helping Missouri better prepare its workforce to meet the needs of business and industry. Partners include the Department of Economic Development, the Division of Workforce Development, MERIC, the Department of Higher Education, and an advisory board. The Department and its partners are exploring the feasibility of expanding the system to serve adults, as well as business and industry, in the belief that career development is a life-long process, and that individuals who develop strong skills and positive attitudes toward life-career development are more likely to choose the education, training, and employment that meet their needs and the needs of the workplace.

#### Missouri Economic and Research Information Center

The Missouri Economic and Research Information Center (MERIC) is the research division for the Department of Economic Development. The agency provides innovative analyses and assistance to policymakers and the public, including studies of the state's targeted industries and economic development initiatives. Other MERIC research includes Economic Condition Reports, Economic Impact Assessments, and Labor Market Information produced in cooperation with the U.S. Department of Labor.

Missouri educators and students have access to a wide range of data on economic development and workforce trends through MERIC's comprehensive Web site at <a href="http://www.missourieconomy.org/customer/edu\_stu.stm">http://www.missourieconomy.org/customer/edu\_stu.stm</a>.

MERIC will be assisting the Division in identifying high-wage, high-skill, and high-demand occupations for years two through six of Perkins IV.

MERIC, the Department of Higher Education, the Department of Economic Development, the Division of Workforce Development, the State Chamber of Commerce and Industry, and the Division of Career Education have reaffirmed the value of partnering together to coordinate

mutual efforts toward Missouri's career and economic development processes. The following areas of development are being approached in a collaborative fashion:

- Creation, printing, and distribution of Career Cluster posters and "Hot Jobs" fliers
- WIA Incentive Grant activities
  - 1. Updated Missouri Career Guide materials for students (partial consolidation into GOALS notebooks)
  - 2. Production of a Career Clusters video
  - 3. Public Outreach strategies
  - 4. Partnership development
- Career Clusters toolkit
- Missouri Connections Web site (strong connections to data on MERIC's Web site)
- Shared planning for outreach, funding, and sponsorship strategies

Additional topics for partnering include: supply and demand (of graduates), the emergence of work readiness certifications, and the new Perkins IV emphasis on high-demand, high-skill, and high-wage occupations.

#### • Career Education Coordinators

The Division of Career Education, through the MCCE, supports eight regional Career Education Coordinators. The coordinators form a network of professionals focusing on nontraditional career awareness, as well as providing information and expertise in career awareness, exploration, and planning for various audiences using the national Career Clusters Initiative as the basis for their work.

Missouri was one of five states selected to participate in the National Alliance for Partnerships in Equity (NAPE) Math, Engineering, Technology, and Science (METS) Equity Pipeline Project. The METS Equity Pipeline's goal is to increase participation of females in secondary and postsecondary METS cluster programs of study necessary for successful secondary/postsecondary transition and degree completion.

The eight Career Education Coordinators will be trained as facilitators to assist school districts in attracting females to METS occupations.

- (i) Describe how funds will be used to improve or develop new career and technical education courses:
  - i. At the secondary level that are aligned with rigorous and challenging academic content standards and student academic achievement standards adopted by the State under Section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as amended;
  - ii. At the postsecondary level that are relevant and challenging; and
  - iii. That lead to employment in high-skill, high-wage, or high-demand occupations

Perkins funds will be utilized in a number of ways to assist in improving existing and developing new career and technical education courses/programs:

#### Missouri Center for Career Education

The Missouri Center for Career Education (MCCE) was established on July 1, 2003 by a grant awarded by the Division of Career Education. The Center is located at the University of Central Missouri in Warrensburg within the College of Education, Department of Career and Technology Education.

MCCE provides quality curriculum and research, targeted professional development, and innovative instructional resources to support the career and technical education system in Missouri. The Missouri Center for Career Education fulfills this mission by:

- working collaboratively with the Division of Career Education, educational institutions and organizations, and representatives from Missouri's businesses and industries;
- developing and maintaining a well-balanced, organized, and accessible collection of resources reflecting quality standards supporting the curriculum and instruction of career and technical education;
- providing training systems to address the professional development needs of career and technical educators;
- contributing to Missouri's commitment to diversity and gender equity;
- establishing networking links within the state's educational community and effectively and efficiently coordinating statewide educational events; and
- offering a well-qualified staff, committed to service and accomplishment.

Some of the specific projects conducted by MCCE to date include:

- Development of the Embedded Credit Toolkit;
- New Teacher Institute (NTI);
- Career Education Mentoring Program;
- Development of Personal Finance Model Curriculum and Online Assessment;
- Developing Career Clusters toolkit; and
- Developing Model Programs of Study Implementation Process.

National Initiatives

Missouri is part of several national curriculum initiatives and will continue to provide funds to support the following initiatives:

- Project Lead The Way<sup>®</sup> (PLTW) [see page 16 for description]
- PLTW Biomedical Sciences Program [see page 16 for description]
- Cisco Networking Academies [see page 16 for description]
- Automotive Youth Educational Systems (AYES) [see page 17 for description]
- High School of Business<sup>TM</sup> The High School of Business experience prepares high school students to excel in a college business program. It is an academy-style program developed by the Marketing Education Resource Center (MarkED) consisting of five or more near-college-level business courses and two pre- and/or co-requisites. This project-based learning environment opens students' minds to solving business problems using the academic skills gained in math, English, and social sciences courses.

- Education's "new 3 R's" can be used to convey how High School of Business will reach and teach students in the 21<sup>st</sup> Century.
- CASE (Curriculum for Agricultural Science Education) Missouri has joined with the National Council for Agricultural Education in the development of a new agricultural education program designed to address the technological and scientific workforce needs for teaching and learning agricultural science. The CASE model is based on foundation courses for freshman- and sophomore-level students.
- R-Factor Learning The Missouri Center for Career Education is working on an initiative titled R-Factor Learning. The initiative is designed to support educators in school reform to specifically address rigorous and challenging learning for all students. The Missouri Center for Career Education utilizes the work of Dr. Willard Daggett, International Center for Leadership in Education, which builds the rigor utilizing Bloom's Taxonomy upper levels of application, analysis, synthesis, and evaluation in lesson design. The study of R-Factor Learning refreshes educator's connection to Bloom's Taxonomy pushing it to the upper levels in designing learning experiences.

R-Factor Learning helps students experience meaningful connections while learning through rigor, relevance, relationships, and responsibilities. It incorporates these factors to push student learning while allowing them to explore and pursue their hopes and dreams of a career and role as an adult.

R-Factor Learning was piloted through the Southeast Regional Professional Development Center for high schools in its consortium school districts. The audience was made up of both individuals and teams. The model is comprised of two sessions separated by 4-6 weeks. This allowed the participants to try some of the strategies, to come back with questions, and to seek reinforcement of the concepts.

Career Clusters and the rigor and relevance framework have been used around the state as separate professional development offerings in the past. The more work that has been done with both, the more obvious it became that together they provided a sound foundation to strengthen teaching and learning.

Scenario-based learning is the primary focus for instructional strategies in this model as recommended by the National Career Clusters Initiative. The University of Missouri Medical School has used this model for a number of years with proven success based on national board exams. This model moves teaching and learning to higher levels of rigor and relevance for student engagement and achievement.

This professional development will be delivered in conjunction with the Regional Professional Development Centers across the state. Practitioners from the field will be selected to form a cadre of trainers with specific training and preparation to deliver the R-Factor Learning workshops. The cadre will consist of teachers, counselors, and administrators, along with some Tech Prep Coordinators and Career Education Coordinators.

#### VTECS

Missouri is a member of the VTECS consortium. VTECS has a 30-year history of operating as a consortium of states where members pool resources to develop competency-based career and technical education products that are validated by business, industry, and labor. In order to develop these products, VTECS employs a complete occupational analysis system whereby data is collected from incumbent workers for the specified occupational area. VTECS works with numerous federal and state agencies to promote the systematic research, development, and implementation of competency-based career-technical education and training.

(j) Describe how the eligible agency will facilitate and coordinate communications on best practices among successful recipients of Tech Prep program grants under Title II and other eligible recipients to improve program quality and student achievement.

The Division of Career Education will disseminate information on best practices to eligible recipients through the annual MoACTE summer conference, technical assistance visits, e-mail, Web site postings, MCCE, and the Building Bridges Conference.

(k) Describe how funds will be used effectively to link academic and career and technical education at the secondary level and at the postsecondary level in a manner that increases student academic and career and technical achievement.

Funds will be used for professional development activities that focus on student achievement of both academic and career and technical achievement. These professional development activities will include, but not be limited to:

- developing programs of study;
- R-Factor Learning (Rigor, Relevance, and Relationships);
- assisting school districts in developing transition courses for students entering high school unprepared to take rigorous content, and for those students identified as likely candidates for remediation upon entering postsecondary education;
- integration of mathematics and career and technical education (CTE) content; and
- developing embedded credit courses.

Further, the following professional development topics were identified as priorities for Perkins IV during a professional development planning meeting held November 11, 2006:

- using data to improve teaching and learning;
- instructional strategies that meet the needs of diverse students;
- connections with industry, including working with advisory committees;
- defining rigor in the different disciplines; and
- raising expectations in CTE courses.

(l) Describe how the eligible agency will report on the integration of coherent and rigorous content aligned with challenging academic standards in career and technical education programs in order to adequately evaluate the extent of such integration. [Sec. 122(c)(1)(A)-(L)]

Missouri has two opportunities to measure student academic success: the Missouri Assessment Program (MAP) and the *High Schools That Work (HSTW)* assessment.

#### • Missouri Assessment Program and End-of-Course Assessments

In 1997, Missouri began implementing a performance-based assessment system for use by all public schools in the state, as required by the Outstanding Schools Act of 1993. The assessment system, known as the Missouri Assessment Program (MAP), is designed to measure student progress in meeting the Missouri Show-Me Standards. The Department worked with teachers, including career and technical education teachers, school administrators, parents, and business professionals throughout the state to develop the Missouri Show-Me Standards, a set of 73 state-adopted rigorous academic performance standards. The State Board of Education adopted the Missouri Show-Me Standards in 1996. The standards describe what graduates of the state's public schools must know and be able to do. To achieve proficiency in the Missouri Show-Me Standards, students must have a strong foundation of knowledge and skills in basic subject areas and must be able to apply what they know to new situations and real-world problems.

The MAP assessments addressed six content areas: mathematics, communication arts, science, social studies, health/physical education, and fine arts. However, due to budget cuts, the Department suspended the assessments of health/physical education, fine arts, science, and social studies. School districts are required to administer only the communication arts and mathematics assessments, as required by No Child Left Behind.

The MAP assessments incorporate three types of test questions in order to evaluate student achievement: multiple choice questions, requiring students to select the correct answer; constructed-response items, requiring students to generate an appropriate response; and performance events, requiring students to respond to, solve problems, or address issues of a complex nature.

Missouri uses an alternate to the statewide assessment for students whose disabilities are so severe that they cannot participate in the regular MAP testing. The Department developed the MAP-Alternate (MAP-A) to allow the participation of severely-disabled students.

The MAP assessments yield data about individual and group academic achievement. The data includes a national percentile rank, achievement levels, and raw scores by content standard/strand. Each level of achievement – Below Basic, Basic, Proficient, and Advanced – has accompanying descriptors that articulate the skills associated with that particular level.

Beginning with the 2008-2009 school year, Missouri plans to replace the current high school MAP tests in math, communication arts and science. These tests will be replaced with the

course-specific tests in algebra I, biology, and English II. During the 2009-2010 school year, additional course-specific tests will be offered in algebra II, geometry, integrated math III, integrated math III, English I, government, and American history.

The course-specific tests will be used to measure academic attainment of career education students in communication arts/reading and mathematics as required in Perkin IV.

#### • High Schools That Work Assessment

Thirty-seven high schools and six area career centers in Missouri are participating in the *High Schools That Work (HSTW)* network. Missouri is one of 32 states that participate in the *HSTW* network which also includes *Technology Centers That Work (TCTW)*, a version of *HSTW* which has been tailored for shared time CTE centers. *HSTW* is an effort-based school improvement initiative founded on the conviction that most students can master rigorous academic and career/technical studies if school leaders and teachers create an environment that motivates students to make the effort to succeed.

A requirement to participate in *HSTW* or *TCTW* is to administer the *HSTW* assessment. The NAEP-based achievement tests in reading, mathematics, science, and a survey of student experiences is administered in even years to 12th grade students.

High Schools That Work links student performance to a set of key practices in a way that helps high school leaders, teachers, and communities improve the achievement of academic and career/technical students and identifies seniors who qualify for the HSTW Award of Educational Achievement.

Missouri continues to address integration of academic and career and technical education skills through several initiatives.

## • R-Factor Learning

See page 28 for description.

#### • Transition Course Development

In an effort to help schools provide more students with the skills needed to take rigorous career and technical education courses, the Division of Career Education sponsored the Southern Regional Education Board's (SREB) training module, *Developing a Ninth-Grade Catch-Up Course in Algebra I*. Together, the training prepared mathematics teachers from high schools and middle schools to develop a course for their own school district for those students entering high school not yet prepared to take college preparatory math content. With those skills in hand by the end of the freshman year, students will able to take more rigorous content throughout their high school experience, including CTE study.

The initial three days of this professional development opportunity were offered at the 2006 Building Bridges Conference. The first two-day call-back session occurred in January 2007. The final two-day call-back session was in May 2007.

Similar to the SREB offerings which are concentrated into an intensive, week-long experience, the Missouri model teams work together to:

- examine and modify model standards-based algebra units proven to be successful in engaging students to master the essential standards;
- decide how to adapt the model units for use in their home schools;
- develop a plan for working with teachers in their home schools to use the template as a model instructional plan; and
- develop a course syllabus that incorporates the model units and the instructional strategies that help students master critical standards, such as effective study skills and working in teams.

In November 2007, the Division of Career Education began the second phase of transitional course development training for teachers and school districts seeking assistance for incoming 9th graders not prepared for college preparatory English/communication arts and seniors identified that were not prepared to take credit-bearing mathematics upon entering postsecondary education. Each of these professional development components will follow the same pattern of two separate two-day call-back sessions during the year to complete the training.

#### • Math and CTE (Career and Technical Education) Integration

A similar professional development opportunity was launched at the 2007 Building Bridges Conference held in November 2007. The Division of Career Education sponsored a training module designed by the SREB as a pre-conference session for faculty teams. The module focused on an eight-step process for integrating mathematics and CTE studies. Math and CTE teacher teams from across the state were identified for seven Career Clusters. Two-day call-back sessions were conducted in January and again in March. A prototype design template for Authentic Integrated Project Units is the resulting outcome of the eight-step process. The process and template will be disseminated during breakout sessions of the divisions represented by the respective Career Clusters during the Missouri ACTE conference in July 2008.

#### • Embedded Credit

See page 20 for description.

#### • Curriculum Alignment Initiative

The Curriculum Alignment Initiative (CAI) is part of the Missouri Department of Higher Education's strategy to increase participation in higher education and to smooth pathways for students entering into and progressing into higher education. The goal of this work is to improve the college readiness of students throughout Missouri, by clearly articulating to high school students what it means to be college ready and to smooth transfer of entry-level collegiate courses. CAI is mandated by Senate Bill 389 and directs public colleges and universities to work the Coordinating Board for Higher Education to develop entry- and exit-level competencies for entry level collegiate coursework. CAI also is driven by the work of the state's METS Coalition and the P-20 Council.

#### • P-20 Council

The mission of the Missouri P-20 Council is to develop a more coherent system of P-20 education (pre-school through graduate school) where each level of education – preschool, elementary, middle school, high school, college and workforce training – prepares students well for the next level, with an eye towards the world of work.

The Council consists of the state's two education agencies – Department of Elementary and Secondary Education and Department of Higher Education; and unlike most states, the Department of Economic Development, the agency with primary responsibility for meeting the needs of business and industry. The job of the P-20 Council is to provide better, stronger, more aligned education and workforce training systems. This alignment of systems and programs will make it easier for all Missourians to get the skills and education they need to compete in an increasingly competitive, global economy.

#### Missouri Student Information System

The Department began implementing the Missouri Student Information System (MOSIS) in the summer of 2005. The system creates a randomly-generated state identification number for every student receiving services in the public schools. The MOSIS number was used to precode students' spring 2007 MAP test booklets. Over 90 percent of Missouri school districts voluntarily participated in the process.

In the fall of 2006, the Department started moving the current Core Data collection system from an "aggregate" system to a student-level collection system. In June 2007, the Department piloted the reporting of Core Data at a student level.

The goals of MOSIS are to reduce data burden on local schools and districts, encourage better policy-making by maintaining a cost-effective and reliable method of reporting and accessing accurate and timely educational information, and eliminate the need for manual operations before data can be used. Through the use of the state identifier, MOSIS will provide more accurate data, reduce the time needed for data collection, and allow quicker responses to data requests, including Perkins accountability data.

- 3. Describe how comprehensive professional development (including initial teacher preparation and activities that support recruitment) for career and technical teachers, faculty, administrators, and career guidance and academic counselors will be provided, especially professional development that-
  - (a) Promotes the integration of coherent and rigorous academic content standards and career and technical education curricula, including through opportunities for academic and career and technical teachers to jointly develop and implement curricula and pedagogical strategies;
  - (b) Increases the percentage of teachers that meet teacher certification or licensing requirements;
  - (c) Is high quality, sustained, intensive, and focused on instruction, and increases the academic knowledge and understanding of industry standards, as appropriate, of career and technical education teachers;

- (d) Encourages applied learning that contributes to the academic and career and technical knowledge of the student;
- (e) Provides the knowledge and skills needed to work with and improve instruction for special populations; and
- (f) Promotes integration with professional development activities that the State carries out under Title II of the Elementary and Secondary Education Act of 1965, as amended, and Title II of the Higher Education Act of 1965, as amended. [Sec. 122(c)(2)(A)-(G)]

#### **Professional Development Planning**

In November 2006, the Division met with other education partners to develop a comprehensive plan of professional development. A staff member from the Southern Regional Education Board (SREB)/High Schools That Work initiative facilitated the two-day meeting. The focus of the two-year professional development plan is student-centered and is based on Bill Daggett's Rigor and Relevance Framework. It shifts teachers from a teacher-centered classroom to more student-centered instruction. Top priorities of the professional development that will be administered include:

- instructional strategies that meet the needs of diverse students;
- connections with industry expectations and standards, including working with advisory committees;
- defining rigor in the different disciplines;
- using data to improve teaching and learning; and
- raising expectations in CTE courses.

#### State-Level Professional Development Activities

Within the Division, individual program sections have the opportunity to apply for professional development funds. These funds can be used for professional development activities and events that are student-centered and follow the high-quality professional development standards that the Department has set forth for all teachers and administrators in the state and meet No Child Left Behind standards for high-quality professional development.

Each program section must develop a professional development plan which lists the overall goal(s) and objective(s). It must include a description of how the professional development is sustained, is of high quality, and how it is linked to the rigor and relevance framework described above.

All professional development events/activities are evaluated using a common evaluation instrument that was developed by the Division.

Some of the professional development activities and events sponsored by the program sections include, but are not limited to:

- Farm Business Management Analysis (FBMA) Education Program Agriculture Education
- Centers of Excellence Workshop series Business and Marketing Education
- Emerging Technologies Workshops Business and Marketing Education
- Teacher Leader Cadre Family and Consumer Sciences

- Meeting Child Development Associate (CDA) requirements, Embedded Credit, and Integrating Leadership through FCCLA Family and Consumer Sciences
- Melior Curriculum and Training Automotive Technology
- Results-Based Evaluation Guidance
- Internal Improvement Review Guidance

#### Professional development relating to the integration of academic and career education

- R-Factor Learning
  See page 28 for description.
- Transition Course Development See page 31 for description.

<u>Professional development related to increasing the percentage of teachers that meet teacher certification or licensing requirements</u>

#### • New Teacher Institute

New Teacher Institute (NTI) is a year-long comprehensive professional development program for new career education teachers. The primary purpose of NTI is to equip beginning career education teachers in developing teaching and instructional management skills needed to perform effectively in the classroom and laboratory. NTI is intended for new career education teachers who do not have a Bachelor of Science degree in teacher education. NTI has three broad goals:

- 1. Develop pedagogical skills of new career education teachers,
- 2. Identify resources to support new career education teachers, and
- 3. Establish a support network for new career education teachers.

Beginning with the 2007-2008 school year, a new component was added to NTI called the Late Session NTI. The purpose of the Late Session NTI is to assist new career education teachers that were hired after the week long NTI summer session.

One other important component of NTI is the Master Teacher Institute. The Master Teacher Institute is designed to train experienced career education teachers to serve as master teachers for the NTI. Master teachers assume the role of a teacher educator. Master teachers are selected to offer NTI participants a variety of technical experience as well as experience from both the secondary and postsecondary levels.

Additional information regarding NTI can be found at http://missouricareereducation.org/pd/nti.html.

### Induction Program

Although designed primarily for career education teachers, the induction program will also involve and provide targeted activity for counselors and administrators. The three-year induction program will be implemented to address the needs of first- and second-year educators and will include the NTI and the Career Education Mentoring Program as components. However, new additions will be made to each of the existing components. The program

additions will encompass coursework for certification, participation in learning modules, networking, professional development opportunities, access to instructional resources, and administrator support. *Resources @ MCCE* (http://missouricareereducation.org/res/index.html) will provide information to teachers regarding content and availability of support materials through the lending library. Informative *Resources @ MCCE* sessions will be conducted during NTI and mid-year mentoring meeting.

The Department's Web site has a section dedicated to Educator Recruitment and Retention (http://www.dese.mo.gov/divteachqual/teachrecruit/). Information in this section includes: Special Education and Counselor Reimbursement programs, Missouri Teacher Education Scholarship, Missouri Minority Teaching Scholarship, Career Ladder, and Loan Forgiveness, as well as an interactive Web site that allows districts to search for available teachers and for teachers to search for available positions (www.successlink.org/jobs).

The Department is required to prepare an annual report for State lawmakers about the state of the teacher workforce in Missouri public schools. The latest report was presented to the State Board of Education in November 2006. It analyses key statistics and trends over the past decade (1994-2006) (http://www.dese.mo.gov/divteachqual/teachrecruit/Recruit\_report.pdf).

#### • Online/Distance Learning Opportunities

Guidance and Placement Services, in cooperation with MCCE and eMints, is developing three projects related to online/distance learning. They are: a) short-term training opportunities on how to conduct an internal review for guidance and counseling program improvement; b) writing the MSIP Standard 6.9 when participating in a 4<sup>th</sup> cycle Missouri School Improvement review; and c) a graduate-level course on comprehensive guidance programs designed primarily for administrators. These projects will lay the foundation for the expansion of online opportunities in other areas of career education.

In addition, MCCE, in cooperation with the University of Central Missouri, is exploring the viability of offering courses required for initial certification of career education teachers through the eMints delivery system.

#### • Set Expenditure Requirements for Eligible Recipients

Local grant recipients will be required to budget no less than 5 percent of their annual allocation to support institutional and individual professional development plans. These funds should be used in conjunction with other locally-available funds to support professional development for career education faculty and administrators. The funds made available through this Act may not supplant local professional development funds.

- 4. Describe efforts that the eligible agency and eligible recipients will make to improve—
  - (a) the recruitment and retention of career and technical education teachers, faculty, and career guidance and academic counselors, including individuals in groups underrepresented in the teaching profession; and
  - (b) the transition to teaching from business and industry, including small business. [Sec. 122(c)(3)(A)-(B)]

The Division sponsors several initiatives related to recruitment and retention and the transition to teaching:

#### • <u>Career Education Mentoring Program</u>

For the past five years, the Division has operated the Career Education Mentoring Program. The program is a two-year program that pairs new teachers/counselors (protégés) with experienced teachers/counselors (mentors) in the program area. The purpose is to give new teachers/counselors the opportunity to learn from an experienced teacher/counselor in the same discipline rather than from a teacher/counselor in their home district in a totally different discipline.

The goals of the Career Education Mentoring Program are to:

- offer a professional learning community to new and returning teachers along with mentor teachers/counselors that includes collaboration and reflection;
- become familiar with the teaching and administrative culture by content area;
- support new and returning teachers in their work with students; and
- build a cohort group of new and returning teachers/counselors, particularly in the content area.

#### • Missouri Administrator Mentoring Program

The Missouri Administrator Mentoring Program (AMP) was designed by statewide stakeholders and implemented in 2005 in response to a State Board of Education regulation. Beginning with the 2005-2006 school year, new school leaders, including school principals, assistant principals, career education directors, special education coordinators and other central office personnel, contracted with the Department for mentoring services over a two-year period. New superintendents of schools contracted for a one-year mentoring program. Mentors complete training addressing cognitive coaching skills and Interstate School Leaders Licensure Consortium (ISLLC) standards. Other training is provided by professional organizations, regional professional development centers, colleges and universities, and the Department.

Since 2005, over 230 new school leaders have received mentoring services.

- New Teacher Institute (NTI)
  See page 35 for description.
- <u>Induction Program</u> See page 35 for description.
  - 5. Describe efforts that the eligible agency and eligible recipients will make to improve the transition of sub-baccalaureate career and technical education students into baccalaureate degree programs at institutions of higher education. [Sec. 122(c)(4)]

Programs of study in Missouri will be developed around a 4 + 2 + (2) articulation model. This includes:

- Courses meeting postsecondary (both 2-year and 4-year college) entrance requirements appropriate for the career pathway within the overall program of study;
- Alignment and/or articulation of competencies between one-year certificate, two-year degree, and four-year degree programs;
- Alignment with industry-recognized knowledge and skills, which leads to a certificate, credential, two-year or four-year degree;
- Collaborative efforts with secondary, postsecondary (two-year and four-year institutions), and business/industry in preparing a gap analysis between course/program outcomes or competencies and industry-recognized knowledge and skills; and
- Maintaining ongoing dialogue among secondary, postsecondary, business, and parent partners at the state and local levels.

As local grant recipients begin the development and implementation of programs of study, institution-level participants should include, but not be limited to:

- four-year baccalaureate degree institution administrator/program chair;
- community college president;
- community college vice president for instruction;
- community college technical dean, director of workforce development, or director of technical programs;
- school district superintendents;
- area career center director;
- high school principal;
- parents; and
- counselor(s).

Program level participants should include:

- four-year baccalaureate degree institution faculty;
- community college faculty;
- school district faculty; and
- area career center faculty.
  - 6. Describe how the eligible agency will actively involve parents, academic and career and technical education teachers, administrators, faculty, career guidance and academic counselors, local business (including small businesses), and labor organizations in the planning, development, implementation, and evaluation of career and technical education programs in your State. [Sec. 122(c)(5)]

Section 178.560 of the Revised Statutes of Missouri requires each area career center, school district, or postsecondary institution receiving state or federal career education funds to appoint and maintain a career education advisory committee to give advice and assistance to the school boards or governing

boards in the establishment and maintenance of career education programs. These advisory committees must include, but are not limited to, at least one individual representing each of the following groups: parents, students, teachers and administrators, business/industry, and labor. Local committees must have appropriate representation of both genders and an appropriate representation of the racial and ethnic minorities found in the area which the committee serves. Local advisory committees must advise the districts and programs on current job needs and the relevance of programs being offered in meeting current job needs.

During the early stages of programs of study development, a broad range of trade associations and professionals representing Missouri business and industry were asked to validate the knowledge and skills for all 16 Career Clusters and 81 Career Pathways through an online survey. Over 700 individuals responded to the online validation process that was operational from November 20, 2006 through January 8, 2007.

A statewide meeting was held on January 25, 2007 with the Industry Advisory Council representatives of the 16 Career Clusters and most of the 81 Career Pathways. The Industry Advisory Councils reviewed and validated the foundation and pathway knowledge and skill statements; reviewed the results from the online validation process; considered needs and expectations at the middle school, high school, and postsecondary grade levels; identified gaps and overlaps; and explored industry credentials and other certifications.

It is anticipated that the Industry Advisory Councils will be called upon periodically to revalidate the knowledge and skills, as well as to provide needed input on various items related to programs of study and career education programs.

- 7. Describe efforts that the eligible agency and eligible recipients will make to—
  - (a) Improve the academic and technical skills of students participating in career and technical education programs, including by strengthening the academic and career and technical components of career and technical education programs through the integration of academics with career and technical education to ensure learning in-
    - i. The core academic subjects (as defined in Section 9101 of the Elementary and Secondary Education Act of 1965, as amended); and
    - ii. Career and technical education subjects;
  - (b) Provide students with strong experience in, and understanding of, all aspects of an industry; and
  - (c) Ensure that students who participate in career and technical education programs are taught to the same challenging academic proficiencies as taught to all other students. [Sec. 122(c)(7)(A)-(C)]

Students who participate in career and technical education programs are taught to the same challenging academic proficiencies as taught to all other students in Missouri's public schools.

• MAP and End-of-Course Assessments
See page 30 for description.

• Embedded Credit
See page 20 for description.

# • Work-Based Learning Opportunities

Missouri students have an opportunity to learn all aspects of the industry through several work-based learning opportunities. These include:

Cooperative Career Education – Cooperative Career Education is a method of instruction which coordinates academic instruction, related career education instruction, and supervised occupational experience. These experiences are based on a formal agreement between the cooperating parties, an individualized training plan, and are under the supervision of the teacher-coordinator who is responsible for overseeing the operation of the program.

Supervised Agricultural Experience Program – Supervised Agricultural Experience Program (SAEP), the experiential learning component of the secondary Agricultural Education program, is designed to provide opportunities for students to experience the diversity of the agriculture, food, fiber and natural resources sectors. Supervised Agricultural Experience Programs consist of all practical agriculture activities of educational value conducted by students outside of class and laboratory instructional time or on school-released time for which systematic instruction and supervision are provided by teacher, parents, employers, and others.

Supervised Business Experience – The Supervised Business Experience (SBE) program is a work-place learning experience, which is an extension of the business education classroom. SBE training is designed for students enrolled in approved career education business education programs such as Business Technology, Accounting II, and Network Administration. The SBE program provides on-the-job work experience that gives students the opportunity to master academic and workplace skills. Students can make the connection with real world expectations in terms of accuracy of work, production, staying on task, responsibility for work—all components which are stressed in the classroom setting. The work experience reinforces the importance of interpersonal skills, which gives students a forum to develop positive workplace experiences as they enter the workforce or prepare for continued education. The SBE program facilitates the transition from the classroom to the workplace.

Supervised Marketing Internship – The Supervised Marketing Internship component provides opportunities for students to experience work-place learning while receiving classroom instruction in the marketing content area. Those who elect to participate in this optional internship must be employed in a marketing job so they can apply the principles learned through the program. It provides excellent insight into the requirements of the marketing career path.

8. Describe how the eligible agency will provide local educational agencies, area career and technical education schools, and eligible institutions in the State with technical assistance. [Sec. 122(c)(15)]

The Division of Career Education has three opportunities to evaluate and provide technical assistance to local educational agencies, including career education programs:

# • Missouri School Improvement Program

The Missouri School Improvement Program (MSIP) has the responsibility of reviewing and accrediting the 524 school districts within a five-year review cycle. The process of accrediting school districts is mandated by State law.

Districts are reviewed on a five-year cycle using three sets of standards which are designed to promote excellence in all Missouri public schools. These standards are resource, process, and performance. The resource standards address the basic requirements that all districts must meet and are quantitative in nature. The process standards address the instructional and administrative processes used in schools. The performance standards include multiple measures of student performance and include academic achievement, reading achievement, ACT achievement, career preparation, and educational persistence.

The final component of the MSIP process is the CSIP (http://www.dese.mo.gov/divimprove/sia/msip/CSIP\_Manual.pdf). The written CSIP directs the overall improvement of a district's educational programs and services.

As part of the MSIP process, the Division of Career Education requires all career education programs to complete the *Self-Monitoring Report for Career Education*<a href="http://dese.mo.gov/divcareered/MSIP/MSIP\_Revised\_Short\_Report\_9-07.doc">http://dese.mo.gov/divcareered/MSIP/MSIP\_Revised\_Short\_Report\_9-07.doc</a>. The *Self-Monitoring Report for Career Education* serves as a tool for school districts to use for program improvement and planning. Aligned with the *Common Standards for Career Education Programs*, the report is used to review local career education programs to determine where standards are being met and where improvements should be made. Findings from the report are used in the district's CSIP for career education program improvement.

#### Perkins Technical Assistance Reviews

Each fiscal year, the Division of Career Education conducts Perkins Technical Assistance Visits (TAVs). The TAVs are completed for secondary, postsecondary, and Tech Prep programs. The primary purpose of the TAVs is to assess the eligible recipient's compliance with the provisions of the Perkins Act and to offer assistance in all areas of program administration. This is accomplished by reviewing the eligible recipient's financial and accountability records to ensure that the eligible recipients are spending Perkins dollars in an appropriate manner and have an accountability system in place to gather data as it relates to the Perkins core indicators of performance.

Prior to the TAV, the Division sends a letter to the eligible recipient informing them of the date of the visit, the Division staff attending the visit, and a general overview of the visit. The letter also references the *Required Documentation Sheet*. This sheet indicates the required documentation for the TAV. The eligible recipient is to use this document as a guide for preparing for the TAV.

Two areas of documentation are reviewed during the TAV:

### Accountability Review

The intent is to verify that the Perkins data being reported to the Division of Career Education is consistent with the definitions for participants, concentrators, and completers.

Nontraditional participation/completion data is reviewed to determine if the students reported are consistent with the nontraditional programs identified by the Division of Career Education.

The eligible recipients are to describe the process used to gather placement data. Students that were not positively placed are to be reported as status unknown, not employed, or not available.

#### Financial Review

A finance worksheet is utilized to document the review. This worksheet is divided into the following categories: records management, allowable costs, time and effort reporting, equipment, and miscellaneous. In addition, a finance interview questionnaire is completed with the eligible recipient.

The following documentation is reviewed for the prior two years and the current year:

- accounting records (financial reports, ledgers, accounts, etc.);
- requisitions, purchase orders, invoices, etc.;
- monthly time sheets;
- semi-annual time certifications;
- job descriptions;
- inventory records; and
- any additional financial information supporting the Perkins grant.

At the conclusion of the TAV, an exit conference is conducted with the eligible recipient. During the exit conference, Division staff provides an overview of the visit which consists of the areas that were reviewed and any concerns and/or best practices that were noted.

After returning to the Department, the Division staff compiles the information gathered from the TAV and prepares a final report of the review. The final report is comprised of two sections, accountability and financial. In each section of the report, any findings and necessary corrective actions are identified. The final report is then sent to the eligible recipient with a cover letter. The letter thanks the eligible recipient for their courtesy, restates the purpose of the visit, and references the final report.

To document the TAV for the Perkins grant, the Division of Career Education maintains a central file to keep documentation from the review.

Division staff includes the following documentation in the file for each TAV:

- correspondence with the eligible recipient regarding the TAV;
- application, budget, and final expenditure report for the year(s) of the TAV;
- accountability data for the year(s) of the TAV;
- finance worksheet;
- interview questions and responses (accountability and finance);
- notes from TAV;
- copies of eligible recipient records that support any findings, if applicable;
- final report; and
- corrective action plan, if applicable.

If any findings and corrective actions are noted in the Perkins final report, the eligible recipient is required to submit, in writing, a corrective action plan (CAP) that addresses these issues. Therefore, within 45 business days of receipt of the Perkins final report, the eligible recipient must submit a detailed CAP, with timelines and persons involved, indicating the steps to be taken to address the findings and recommendations.

Division staff then reviews the CAP to ensure that the plan is sufficient and that all the findings have been adequately addressed. If acceptable, staff will include the CAP in the central file along with the other documentation for the eligible recipient. If not acceptable, Division staff will contact the eligible recipient for additional information and/or documentation.

Once the anticipated completion date for corrective action has occurred, Division staff will contact the eligible recipient to ensure that the corrective action has been implemented. This follow-up will be handled via a phone call or an e-mail. To verify that the CAP has been completed, the eligible recipient may be required to submit additional documentation to the Division. This documentation would be included in the central file with the other monitoring documentation. If additional documentation is not required, staff will document the follow-up with the eligible recipient and include it in the central file. In addition, during the eligible recipient's next Perkins TAV, the Division will review the findings with the eligible recipient and ensure the necessary corrective action has been properly implemented.

• <u>High Schools That Work</u> and <u>Technology Centers That Work Technical Assistance Visits</u> Missouri is among 32 states that participate in the <u>High Schools That Work (HSTW)</u> network which also includes <u>Technology Centers That Work (TCTW)</u>, a version of <u>HSTW</u> which has been tailored for shared time with career and technical education centers. <u>HSTW</u> is an effort-based school improvement initiative founded on the conviction that most students can master rigorous academic and career/technical studies if school leaders and teachers create an environment that motivates students to make the effort to succeed. Currently, Missouri has 37 high schools and six area career centers that are participating in <u>HSTW or TCTW</u>.

As part of the *HSTW/TCTW* process, districts that are part of the network must undergo a TAV sometime during their first two full years of operation. The TAV is conducted by a team of

professional educators, including Division staff, who are knowledgeable of the *HSTW* primary goals, key practices, and key conditions. The *HSTW* or *TCTW* TAV determines the extent to which the school is currently implementing key, research-based practices, and has certain key conditions in place supporting improved student achievement.

Other less formal technical assistance activities include onsite visits by program staff at the request of an individual school district or teacher. Division staff provides updates at professional teacher association meetings, conferences, and regional program area meetings. There are also discussion lists on Division-sponsored listservs.

In addition, MCCE will continue to provide professional development and technical assistance around programs of study, embedded credit, R-Factor Learning, Career Clusters, and nontraditional CTE program participation and completion.

# 9. Describe how career and technical education in Missouri relates to the State's and region's occupational opportunities. [Sec. 122(c)(16)]

## Missouri Economic and Research Information Center

Missouri Economic and Research Information Center (MERIC) is the research division for the Missouri Department of Economic Development. The agency provides innovative analyses and assistance to policymakers and the public, including studies of the state's targeted industries and economic development initiatives. Other MERIC research includes Economic Condition Reports, Economic Impact Assessments, and Labor Market Information produced in cooperation with the U.S. Department of Labor.

Missouri educators and students have access to a wide range of data on economic development and workforce trends through MERIC's comprehensive Web site at <a href="http://www.missourieconomy.org/customer/edu">http://www.missourieconomy.org/customer/edu</a> stu.stm.

## Missouri Connections

Missouri Connections.org currently is an educational and career planning information system for students in grades 6 through 14. It is sponsored and guided by the Department of Elementary and Secondary Education in collaboration with several partners interested in helping students make meaningful connections with education, career preparation, and employment demand, thereby helping Missouri better prepare its workforce to meet the needs of business and industry. Partners include the Department of Economic Development, the Division of Workforce Development, MERIC, the Department of Higher Education, and an advisory board. The Department and its partners are exploring the feasibility of expanding the system to serve adults, as well as business and industry, in the belief that career development is a life-long process, and that individuals who develop strong skills and positive attitudes toward life-career development are more likely to choose the education, training, and employment that meet their needs and the needs of the workplace.

## Missouri Workforce Investment Board

The Commissioner for the Department of Elementary and Secondary Education is a member of the Governor-designated Missouri Workforce Investment Board (MoWIB). The MoWIB establishes the vision for how the State's workforce system can provide the skills needed in a 21<sup>st</sup> Century economy

that will improve the quality of life for Missourians. Other members of the board include representatives from higher education, community colleges, business and labor organizations. The MoWIB requires a 51 percent business composition.

10. Describe the methods the eligible agency proposes for the joint planning and coordination of programs carried out under this legislation with other Federal education programs. [Sec. 122(c)(17)]

## electronic Planning and electronic Grants System (ePeGS)

The Department of Elementary and Secondary Education is in the process of developing a Department-wide grant application, ePeGS, which will include the Perkins grant. The purpose of this system is to create a seamless planning and e-grants process for school districts, other educational institutions, and the Department so there is a consistent application process to provide information for budgets and school improvement planning. The goals of the project include:

- a cross-divisional planning process that meets State and Federal requirements, and
- a consolidated grant application process that integrates with the planning process to ensure the budget supports the plan and integrates with the allocation and payment of funds.

### Department Strategic Plan

high academic standards.

The Department is required by the State Government Administrative Rules and Regulations to develop and submit a strategic plan which serves as the basis for budget requests before the Missouri General Assembly and Department program operation. The strategic plan (http://dese.mo.gov/divadm/StrategicPlan.html) lists the key outcomes, objectives, and key programs the Department will employ to maintain high achievement for all students. It serves as a focal point to coordinate federal and state educational programs under the auspices of the Department to achieve

Staff from all divisions is assigned to each of the five outcomes with a division assistant commissioner assigned as leadership liaisons to each outcome.

## School Improvement Teams/Success Teams

The Division participates in a statewide effort known as Project Success. The vision of Project Success is to improve student performance by intensifying and customizing resources to address specifically identified needs.

Project Success Teams work cooperatively with local school districts to overcome difficulties meeting the MSIP performance standards and encourage long term systemic school improvement initiatives.

#### Missouri Integrated Model

Through the support of a State Personnel Development Grant (SPDG) funded by the U.S. Department of Education, Missouri is researching, developing and implementing an integrated, three-tiered model of student support. The Missouri Integrated Model (MIM) draws upon eleven common essential elements found in the literature on five existing three-tiered models. Those models are Positive Behavior Supports (PBS), Professional Learning Communities (PLC), Reading First (RF), Response to Intervention (RtI) and High Schools That Work (HSTW). The MIM will allow school districts to

seamlessly integrate all of the components of effective three-tiered models to address the academic and behavioral needs of students from preschool through high school resulting in positive educational outcomes for all students.

11. Describe the procedures the eligible agency will develop to ensure coordination and non-duplication among programs listed in Sections 112(b)(8) and 121(c) of the Workforce Investment Act (Public Law 105-220) concerning the provision of services for postsecondary students and school dropouts. [Sec. 122(c)(20)]

The programs identified in Section 112(b)(8) of the WIA are represented on the MoWIB. Coordination and communication regarding the identified programs occurs at MoWIB meetings. Discussions focus on coordination and non-duplication of services, as well as services for postsecondary students and school dropouts. Intra-agency efforts with programs under the Adult Education and Family Literacy Act and the Missouri Option Program focus on high school diploma attainment or equivalency which aid students in enrolling in postsecondary career and technical education programs.

Postsecondary career and technical education institutions are active partners in the state one-stop career center delivery system. Most institutions have a representative that serves on the local workforce investment board. Postsecondary institutions also participate in Memorandums of Understanding (MOUs) which describe the specific services provided by the postsecondary institution as a one-stop partner.

## **B.** Other Department Requirements

1. Provide a copy of the local applications or plans for secondary and postsecondary eligible recipients, which will meet the requirements in Section 134(b) of the Act.

See Appendix B for a copy of the Secondary, Postsecondary, and Tech Prep Local Applications.

2. Describe the State's governance structure for career and technical education, including the approximate number of eligible recipients at both secondary and postsecondary levels.

The State Board of Education is the sole state agency responsible for the administration and supervision of career education programs authorized by the Carl D. Perkins Career and Technical Education Improvement Act of 2006, Public Law (P.L.) 109-270. The State Board of Education has statutory authority to cooperate with the U. S. Department of Education in the administration of the five-year state plan for Career Education in Missouri and will not delegate its responsibilities under this law to any other State agency.

According to the Missouri Constitution, "The supervision of instruction in the public schools shall be vested in a state board of education...." (Article IX, Section 2(a); 1945). This provision gives the State Board of Education general authority for public education, within limits set by the General Assembly. The State Board has the constitutional responsibility to establish policy, supervise instruction in the public schools, and adopt accreditation rules for the operation of Missouri schools (Section 161.092, Revised Statutes of Missouri [RSMo]). The State Board's duties and responsibilities range from preschool through grade twelve, secondary career education, postsecondary career education, adult education, Veterans' Education and Training, and Vocational Rehabilitation.

By law, the State Board serves as the state-level governing body for secondary career education programs provided by local school districts, as well as postsecondary career education programs offered by community colleges, a state technical college, and public four-year institutions that are supported, in part, by the State Plan for Career Education. The State Board is responsible for the coordination and development of policy with respect to the career education programs under P.L. 109-270 and for the development of the State Plan.

Within the Department of Elementary and Secondary Education, the Division of Career Education has a major responsibility for secondary, postsecondary, and adult career education in Missouri. Programs and services provided include assistance with program approval, effective practices, technical assistance, funding, and Career and Technical Student Organizations (CTSOs). Program content specialists are available in the following areas: Agricultural Education; Business, Marketing, and Cooperative Education; Family and Consumer Sciences Education; Health Sciences Education; Technology Education; and Trade and Industrial Education. Other multi-discipline issues addressed include articulation agreements between schools, cooperative education, entrepreneurship education, gender equity, the Missouri Comprehensive Guidance Program (MCGP), labor market information, program evaluation, regional planning, Tech Prep education, civil rights compliance reviews, and special populations.

The Division of Career Education program content specialists serve as state advisors for the secondary CTSOs, including DECA, FFA, FCCLA, FBLA, TSA, and SkillsUSA. The postsecondary CTSOs are Postsecondary Agriculture Students (PAS), Delta Epsilon Chi, Phi Beta Lambda, and SkillsUSA. The adult CTSO is Missouri Young Farmers/Young Farm Wives Association.

The Division of Career Education is organized into two units, Career Education unit and Adult Education and Employment Training. The Career Education unit has responsibility for the program content areas, as well as Guidance and Placement Services, Missouri Option Program, *High Schools That Work*, and Special Needs. The Adult Education and Employment Training unit has four sections which link career education with life-long learning experiences, employment-specific training and education opportunities, and other programs associated with the Workforce Investment Act of 1998.

The career education delivery system is Missouri's primary educational system for preparing the state's workforce. Career education programs provide individuals with the technical knowledge and skills needed to prepare for employment in current and emerging fields, to continue their education, or to be retrained for new business and industry practices. The scope of Missouri's career education delivery system includes career awareness and self-assessment of interests and skills at the junior and middle school level, occupational skill development at the secondary and postsecondary levels, and Customized Training for Missouri's business and industry.

The Missouri career education delivery system provides statewide local delivery of services through 12 community college service regions (which in some cases may include multiple community college campuses), 58 area career centers, one state technical college, seven four-year universities offering two-year associate degree programs, and 443 comprehensive high schools. In addition, the system includes two state agencies, the Department of Corrections and the Department of Social Services, Division of Youth Services.

The Missouri career education delivery system provides programs, services, and activities to serve individuals who:

- are in secondary schools,
- are in postsecondary career education programs,
- are adults in need of training or retraining,
- have disadvantaged and/or disabling conditions, or
- are members of other special populations.

In carrying out its responsibilities for the administration of the statewide career education delivery system, the State Board of Education, through its employees, has cooperative arrangements with other agencies of State government. The Division of Career Education cooperates in planning, maintaining, and appraising career education programs with other state agencies, such as the Departments of Higher Education, Economic Development, Social Services, Labor and Industrial Relations, and Corrections.

# 3. Describe the role of postsecondary career and technical education in the one-stop career center delivery system established by Title I of WIA.

The Assistant Commissioner for the Division of Career Education is a member of the Governor-designated MoWIB. The MoWIB establishes the vision for how the state's workforce system can provide the skills needed in a 21<sup>st</sup> Century economy that will improve the quality of life for Missourians. Other members of the board include representatives from higher education, community colleges, business and labor organizations.

Postsecondary career and technical education institutions are active partners in the state one-stop career center delivery system. Most institutions have a representative that serves on the local workforce investment board. They also meet regularly with all one-stop partners. All postsecondary institutions provide WIA-approved training for individuals referred to them through the one-stop system. Perkins postsecondary recipients are actively involved where the Department of Labor has funded Workforce Innovation in Regional Economic Development (WIRED) grants to transform regional economies and to prepare workers for high-skill, high-wage career opportunities. Postsecondary institutions will be involved in lifelong learning accounts (LILAs) as they become available in the state to meet the needs of employed workers and their contributing employers.

#### III. PROVISION OF SERVICES FOR SPECIAL POPULATIONS

## A. Statutory Requirements

1. Describe the eligible agency's strategies for special populations listed in Section 3(29) of the Act, including a description of how individuals who are members of the special populations.

Special Populations are defined by the Act as:

- Individuals with disabilities;
- Individuals from economically-disadvantaged families, including foster children;
- Individuals preparing for nontraditional fields;
- Single parents, including single pregnant women;
- Displaced homemakers; or
- Individuals with limited English proficiency.

## Recruitment/Enrollment

### Secondary:

- Prior to the beginning of the school year, local recipients must advise students, parents (K-12), employees, and the general public that all career education opportunities are offered regardless of race, color, national origin, sex, or disability.
- Develop brochures, prepare media advertising, coordinate special materials and recruitment activities designed to appeal to members of special populations. Recruitment materials must be available to communities of non-English speakers in their languages, if applicable.
- Recipients will provide information no later than the beginning of the ninth-grade year to students who are members of special populations and their parents concerning: opportunities available in career education together with eligibility requirements for enrollment in career education programs; specific courses/programs that are available; employment opportunities; nontraditional programs; placement rates; and special services that are available, including Guidance and Placement Services.
- Recipients must designate at least one employee to coordinate the efforts in serving students with disabilities.
- Identify and recognize, through contests and other award programs, those entering nontraditional occupations.

## Postsecondary:

- Prior to the beginning of the school year, recipients must advise students, parents, employees, and the general public that all career education opportunities will be offered regardless of race, color, national origin, sex, or disability.
- Develop brochures, prepare media advertising, and coordinate special materials designed to appeal to members of special populations. Recruitment materials must be available to communities of non-English speakers in their languages, if applicable.

• During the enrollment process, recipients must inform all first year (freshman) students, including members of special populations, about programs and support services offered at the institution to assist with program completion and graduation.

### Skill attainment/program completion/graduation

#### Secondary:

- Assist in identifying the level of support services needed for members of special populations to be successful.
- Coordinate and facilitate support groups, resources, and support services, including child care, adaptive materials, tutors, clothing or special supplies, and transportation, this may include the need to collaborate with outside agencies.
- Provide in-service activities for faculty, staff, counselors, and administration that identify strategies for serving special populations, including differentiated instructional strategies for students with disabilities.
- Collect data regarding the progress of special population students enrolled in career education programs and courses.
- Collaborate with other (non-career education) individuals serving members of special populations. For example, non-career education individuals might be counselors, special education instructors, or vocational rehabilitation.
- Coordinate with outside agencies such as the Division of Vocational Rehabilitation, where appropriate.
- Facilitate access for special populations entering nontraditional programs and training.

#### Postsecondary:

- Assist in identifying the level of support services needed for members of special populations to be successful.
- Coordinate and facilitate access to tutoring and other academic resources for special populations.
- Provide in-service activities for faculty, staff, counselors, and administration that identify strategies for serving special populations, including differentiated instructional strategies for students with disabilities.
- Assist with data collection regarding the progress of special population students.
- Collaborate with other (non-career education) individuals serving members of special populations.
- Coordinate with outside agencies such as the Division of Vocational Rehabilitation, Rehabilitation Services for the Blind, Veteran's Administration/Vocational Rehabilitation Office and other agencies, where appropriate.
- Facilitate access for special populations entering nontraditional programs and training.

#### Transition services

#### Secondary:

• Conduct student workshops on job-readiness skills, resume writing, time management and personal finance.

- Coordinate mentoring and role-model programs.
- Facilitate the transition from secondary to postsecondary and from secondary to employment by assisting with applications and interviews, working with business and community agencies, coordinating with workforce development agencies and Vocational Rehabilitation, if necessary.
- At the beginning of each school year, provide information to all career education senior (12<sup>th</sup> grade) students about their rights and responsibilities as well as the responsibilities of postsecondary schools with regard to Section 504 of the Rehabilitation Act of 1973. Including general information about college programs and support services offered at institutions to assist students with program completion and graduation.

## Postsecondary:

- Facilitate the transition from postsecondary to further education or employment by working with businesses, agencies and institutions to insure equal access for students of special populations, including participation in internships and practicum experiences.
- Conduct student workshops on job-readiness skills, resume writing, time management and personal finance.
- Coordinate mentoring and role-model programs.
- Provide information on college web-sites, in catalogs, student handbooks, and other college publications regarding the right and responsibilities of students, indicating compliance with Section 504 of the Rehabilitation Act of 1973.
  - (a) Describe how individuals who are members of special populations will be provided with equal access to activities under Perkins IV. [Section 122(c)(9)(A)]

Section 427 of the General Education Provisions Act (GEPA) requires each local recipient of funds to include in its application a description of the steps the applicant proposes to take to ensure equitable access to and participation in, its federally-assisted program for students, teachers, and other program beneficiaries. In their application, local recipients must outline steps to be taken to overcome any barriers of race, color, national origin, sex, or disability. Individuals who are members of special populations will be provided with equal access to all career education programs that are available to individuals who are not members of special populations, including occupationally specific courses of study, cooperative education, apprenticeship programs, comprehensive career guidance, and counseling services. To insure equal access, the following strategies will be implemented at the local recipient level:

#### Secondary:

- Timely notification to all students of available programs and services no later than the 9<sup>th</sup> grade.
- Identification and location of target population to ensure the success of recruitment strategies.
- Enrollment and participation by members of special populations in numbers that mirror numbers in the general population.
- Print recruitment materials in other languages and alternate formats, if applicable.
- Entry requirements that do not judge candidates for admission to career and technical education programs on the basis of race, color, national origin, sex, or disability.
- Opportunities in work study, cooperative education, and job placement programs are available to all students, regardless of race, color, national origin, sex, or disability

- Ensure that the development and implementation of articulation agreements do not discriminate on the basis of race, color, national origin, sex, or disability.
- Assistance and support for members of special populations, including individuals entering nontraditional courses of study.

#### Postsecondary:

- Entry requirements that do not judge candidates for admission to career and technical education programs on the basis of race, color, national origin, sex, or disability.
- Postsecondary recipients must utilize admission exams and criteria which do not discriminate against students with disabilities, or other special populations.
- Postsecondary recipients may not make pre-admission inquires regarding disabling conditions.
- Postsecondary recipients should provide recruitment materials in alternative formats and other languages, as needed.
- Postsecondary recipients should insure that access to applying for financial aid or assistance is made available to all students regardless of race, color, national origin, sex, or disability.
- Ensure that the development and implementation of articulation agreements do not discriminate on the basis of race, color, national origin, sex, or disability.
- Postsecondary recipients should offer appropriate support and assistance for members of special populations, including individuals entering a nontraditional course of study.
  - (b) Describe how individuals who are members of Special Populations will not be discriminated against on the basis of their status as members of special populations. [Section 122(c)(9)(B)]

Career education programs will be provided in the least restrictive environment in compliance with P.L. 108-446, The Individuals with Disabilities Education Act of 2004 (secondary only), Title II of the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Local recipients will also assure that they are in compliance with Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, and the Age Discrimination Act of 1975. In addition, all institutions offering career education programs, courses, and services will develop and disseminate nondiscrimination policies, publish names of contact persons within the institution, disseminate grievance policies and publish the location of accessible facilities.

State level career education staff will conduct secondary and postsecondary civil rights compliance onsite reviews to assure compliance with the 1979 Career Education Guideline for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Handicap. Technical assistance is also provided to both secondary and postsecondary institutions as they develop strategies to assure nondiscrimination.

(c) Describe how individuals who are members of special populations will be provided with programs designed to enable the special populations to meet or exceed state-adjusted levels of performance, and how it will prepare special populations for further learning and for high-skill, high-wage or high-demand occupations. [Section 122(c)(9)(C)]

Eligible recipients will ensure that strategies and services for members of special populations will lead them to meet high levels of performance and to pursue further learning or entry into high-skill, high-wage, or high-demand occupations in current or emerging occupations. Using a team approach to coordinate activities, specific services provided in collaboration with the network of support personnel will include:

#### Secondary:

- Identifying special population individuals who require additional assistance in meeting performance levels.
- Communicating specific needs and modified instructional strategies to instructors and other
  appropriate personnel in order to support a successful learning experience for members of
  special populations.
- Providing services such as tutors, note takers, instructional aides, special materials, remedial
  instruction, language instruction, adaptive technology, and other support services that may
  require collaboration with other agencies in providing child care, financial assistance, and
  transportation.
- Providing career counseling and job readiness skills, coordinating placement in work-based settings, and assisting with entry into employment or further education.
- Providing mentors and role models, particularly for those entering nontraditional occupations.

#### Postsecondary:

- Providing services such as extended time for exams, note takers, instructional aides, special
  materials, remedial instruction, language instruction, adaptive technology, and other support
  services.
- Notifying postsecondary instructors of the need for reasonable academic accommodations to insure equal access for students of special populations.
- Providing access to career counseling, job readiness skills, and job placement activities for students of special populations.
  - 2. Describe how the eligible agency will adequately address the needs of students in alternative education programs, if you have such programs. [Sec. 122(c)(14)]

The state's role in the implementation of Perkins IV is to ensure that students in alternative learning environments are not denied access to career education and that they successfully progress to further education or to employment in high-skill, high-wage or high-demand occupations. The following strategies will address this need:

#### Secondary:

- Eligible recipients will focus a portion of their recruiting efforts on students in alternative settings.
- Eligible recipients will provide Basic Skills instruction, individualized counseling, and flexible scheduling, when appropriate.
- Eligible recipients will continually monitor student progress in relation to meeting or exceeding statewide performance standards, state-adjusted levels of performance, and progress in completing a career education course of study.

- Eligible recipients may provide alternative learning settings separate from other school district programs to meet the needs of career education students. Examples of an alternative setting could be a credit recovery program or the Missouri Option Program.
- If recipients develop an alternative learning setting, they must designate at least one employee to coordinate the program and instruction.
- Eligible recipients will provide information about nontraditional careers and courses of study.

# 3. Describe how funds will be used to promote preparation for high-skill, high-wage, or high-demand occupations and non-traditional fields. [Sec. 122(c)(18)]

All students should be encouraged to explore all available career and training options, including those that are nontraditional for their gender. The act defines nontraditional training and employment as occupations or fields of work for which individuals from one gender comprise less than 25 percent of the individuals employed in each occupation or field of work. The state has established eight regional career education coordinators who form a network of professionals focusing on nontraditional careers, as well as providing information and expertise in career awareness, exploration and planning for various audiences.

Career education coordinators promote nontraditional career awareness and also work with the national career cluster initiative. The following activities are anticipated:

- developing posters and brochures highlighting nontraditional careers;
- offering training workshops and seminars;
- developing classroom activities;
- targeting middle school students to encourage young women to enter high-tech occupations;
- coordinating an on-loan library of video and print materials;
- coordinating with other workforce development agencies; and
- distributing "best practices" information.

In addition, the career education coordinators will:

- promote awareness of nontraditional career opportunities for both males and females;
- recruit both males and females into nontraditional training programs;
- coordinate efforts to retain nontraditional students in programs and help them successfully complete their training; and
- prepare nontraditional students for the workplace.

# 4. Describe how funds will be used to serve individuals in State correctional institutions. [Sec. 122(c)(19)]

Preparing criminal offenders to re-enter society with marketable job skills and assisting incarcerated youth to prepare for further education or high-skill, high-wage or high-demand occupations is part of the mission of career education. The state will develop model programs that address the need of incarcerated adults and youth. To this end, through a Request For Proposal process, project proposals will be solicited that focus on one or more of the following:

- providing career exploration and counseling;
- providing job readiness skills and interview skills, resume-writing, time management, group dynamics and personal hygiene;
- focusing on preparing incarcerated women for nontraditional jobs after release;
- providing remedial or basic instruction to prepare incarcerated individuals for further education; or
- occupational skills training for incarcerated individuals.
  - 5. Describe how the eligible agency will require each applicant for funds to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its Federally-assisted program for students, teachers, and other program beneficiaries with special needs as contained in Section 427(b) of the General Education Provisions Act as amended. For further guidance and examples, see the Notice to All Applicants at http://www.ed.gov/fund/grant/apply/appforms/gepa427.doc.

Career education programs will be provided in the least restrictive environment in compliance with P.L. 108-446, The Individuals with Disabilities Education Act of 2004 (secondary only), Title II of the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Local recipients will also assure that they are in compliance with Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, and the Age Discrimination Act of 1975.

Section 427 of the General Education Provisions Act (GEPA) requires each eligible recipient to include in its application a description of the steps the applicant proposes to take to ensure equitable access to and participation in, its federally assisted program for students, teachers, and other program beneficiaries. Local recipients must outline, in their application, steps to be taken to overcome any barriers of race, color, national origin, sex, or disability. Individuals who are members of special populations will be provided with equal access to all career education programs that are available to individuals who are not members of special populations including occupationally specific courses of study, cooperative education, apprenticeship programs, comprehensive career guidance, and counseling services.

In addition, all institutions offering career education programs, courses, and services will develop and disseminate nondiscrimination policies, publish names of contact persons within the institution, disseminate grievance policies and publish the location of accessible facilities.

State level career education staff will conduct secondary and postsecondary civil rights compliance onsite reviews to assure compliance with the 1979 Vocational Education Programs Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Handicap. Technical assistance is also provided to both secondary and postsecondary institutions as they develop strategies to assure nondiscrimination in all career education programs.

#### IV. ADMINISTRATION AND EVALUATION

### A. Statutory Requirements

1. Describe the procedures the eligible agency will use to obtain input from eligible recipients in establishing measurement definitions and approaches for the core indicators of performance for career and technical education students at the secondary and postsecondary levels, as well as for any other additional indicators of performance identified by the eligible agency. [Sec. 113(b)(1)(A)-(B), sec. 113(b)(2)(A)-(C)]

The Division of Career Education posted the proposed measurement definitions and approaches for the core indicators of performance on the Department of Elementary and Secondary Education Web site for input. The Division used an Internet-based survey to gather input. The Division notified the following organizations/associations/groups when the proposed measurement definitions and approaches for the core indicators were available for review and solicited input through educational organizations such as Missouri Association of Career and Technical Education, Missouri Community College Association, and Missouri Association of Secondary School Principals. In addition, an announcement was included in the Commissioner of Education's letter to school administrators asking them for their input.

Division staff met with the community college career and technical education deans in December 2006 to review the Perkins IV legislation with specific discussion on the postsecondary measurement definitions and approaches for the core indicators of performance. There was also discussion around the definition of high-wage, high-demand, and high-skill occupations in Missouri.

Additional input was solicited from stakeholders through the normal communication channels and public hearings.

2. Describe the procedures the eligible agency will use to obtain input from eligible recipients in establishing a State adjusted level of performance for each of the core indicators of performance for career and technical education students at the secondary and postsecondary levels, as well as State levels of performance for any additional indicators of performance identified by the eligible agency. [Sec. 122(c)(10)(A), sec. 113(b)(3)(B)]

The state-adjusted levels of performance for academic attainment (communication arts/reading and mathematics) and graduation rates for Perkins IV will align with No Child Left Behind. Regional meetings were conducted throughout the state soliciting input on establishing state-adjusted levels of performance for all other indicators. It was determined that a baseline will be established for each core indicator using three-year average performance, when available. When data are not available, the state will establish a baseline from estimates and projections using data from related databases.

Division staff met with the community college career and technical education deans in December 2006 to review the Perkins IV legislation with specific discussion on the postsecondary measures and the definition of high-wage, high-demand, and high-skill occupations in Missouri. Again, regional

meetings were conducted throughout the state soliciting input on establishing state-adjusted levels of performance for postsecondary measures.

Additional input was solicited from stakeholders through various communication means and public hearings.

3. Identify, on the forms in Part C, the valid and reliable measurement definitions and approaches that the eligible agency will use for each of the core indicators of performance for career and technical education students at the secondary and postsecondary/adult levels, as well as any additional indicators of performance identified by the eligible agency, that are valid and reliable. Describe how the proposed definitions and measures are valid and reliable. [Sec. 113(b)(2)(A)-(B)]

See Part C, page 80, for the measurement definitions and measurement approaches for all secondary and postsecondary performance indicators. The definitions and measures can be collected through the Missouri Student Information System (MOSIS) system for most indicators. Additional data is collected through the state Core Data system. These systems have proven to be valid and reliable.

Division of Career Education staff have met and continue to meet with the appropriate Department staff regarding how to collect the data for Perkins IV accountability through MOSIS, which is being developed by the Department of Elementary and Secondary Education. When fully implemented, MOSIS will help school districts maintain more accurate information and manage student data more efficiently, including the Perkins accountability measures.

Technical skill assessments are offered in all Career and Technical Education (CTE) programs. Currently, Missouri uses a variety of methods to assess technical skill attainment including State and/or Local competency profiles, grade point average, locally-developed assessments and third-party administrator examinations. Beginning in FY09, the State will start phasing in third-party, industry-recognized assessments for all CTE programs. Over the next four years, the State anticipates increasing the number of secondary completers taking the industry-recognized skill assessment by 25% each year; with a goal of 100% in four years. Similarly, industry-recognized skill assessments for postsecondary and adult CTE students will increase at a rate of 33% each year for the next three years with a goal of 100%. Missouri will incorporate assessment tools developed by national organizations, such as the American Association of Family and Consumer Sciences (AAFCS), Skills USA, and NOCTI. The State will continually monitor and select/incorporate new assessments as they become available and if appropriate.

4. Describe how, in the course of developing core indicators of performance and additional indicators of performance, the eligible agency will align the indicators, to the greatest extent possible, so that information substantially similar to that gathered for other State and Federal programs, or for any other purpose, is used to meet the Act's accountability requirements. [Sec. 113(b)(2)(F)]

The staff in the Division of Career Education recommends and supports the development of measures, data collection, and reporting through the processes already being used. Additionally, it is the intent of the Division staff to use existing processes to reduce duplication of effort and use consistent and

reliable data. Additional input on alignment and duplication was solicited from stakeholders in the Department of Elementary and Secondary Education as well as through the normal communication methods and public hearings.

5. On the forms provided in Part C provide, for the first two years covered by the State Plan (July 1, 2007 – June 30, 2008 and July 1, 2008 – June 30, 2009), performance levels for each of the core indicators of performance, except that States submitting one-year transition plans are only required to submit performance levels for part of the indicators as discussed above. For performance levels that are required, the States' performance levels, at a minimum, must be expressed in a percentage or numerical form, so as to be objective, quantifiable, and measurable; and require the State to continually make progress toward improving the performance of career and technical education students. [Sec. 113(b)(3)(A)(i)-(II)]

States' performance levels are listed as percentages and require the State to continually make progress toward improving the performance of career and technical education students.

Section 113(b)(2) of the Perkins Act requires a State to develop valid and reliable core indicators of performance, to propose performance levels in its State Plan, and to reach agreement with the Department on "adjusted performance levels" for each of the core indicators. In so doing, the Perkins Act prescribes the measures that a State must use for some of the core indicators.

Section 113(b)(2)(A)(i) of the Perkins Act requires a State to measure career and technical education students' attainment of "challenging academic content standards" and "student academic achievement standards" that a State adopted pursuant to Section 1111(b)(1) of the ESEA. The Perkins Act further requires a State use its State's academic assessments (i.e. the State's reading/language arts and mathematics tests) implemented under Section 1111(b)(3) of the ESEA to measure career and technical education students' attainment of these State standards. Thus, a State's core indicators must include career and technical education students' proficiency in reading/language arts and mathematics as measured under 1111(b)(1) and (3) of the ESEA. Accordingly, under the Perkins Act, a State must report the number or percent of its career and technical education students who score at the proficient level or above on the State's assessments in reading/language arts and mathematics administered under the ESEA to measure the academic proficiency of secondary career and technical education students against the **ESEA** standards.

To measure attainment of these standards, a State must develop and reach agreement with the Department on "adjusted performance levels," which constitute the State's performance targets for a program year. Permissible targets (i.e. "adjusted performance levels") would be a State's "annual measurable objectives" (AMOs) from its State's ESEA accountability workbook. (To ensure that a State's schools are making "adequate yearly

progress" (AYP) as required under Section 1111(b)(2)(A) of the ESEA, Section 1111(b)(2)(G) of the ESEA requires a State to establish Statewide AMOs, which identify a single minimum percentage of students who are required to meet or exceed the proficient level on the State's academic assessments each year.) Under the Perkins Act, a State may propose different performance levels (targets) instead of its AMOs as discussed below.

It is the State's intent to use the exact information, processes, and reporting used for No Child Left Behind for Perkins accountability through use of Missouri Student Information System (MOSIS), as described on page 33.

The Division of Career Education agreed that lower standards for career and technical education students would not send the correct message to stakeholders. The consensus at this time is to adopt the Annual Yearly Progress (AYP) cut scores approved by the State Board of Education. For reporting of No Child Left Behind data, the Department of Elementary and Secondary Education has proposed a uniform minimum cell size of 50 to replace the following:

- Thirty is the minimum number of students in a subgroup for reporting purposes.
- The required number of students in a subgroup for accountability purposes is thirty.
- In order to provide more validity and reliability to decisions about AYP based on subgroups, Missouri will use a cell size of 50 for students who are English Language Learners (ELL) and students with disabilities.
  - b. Section 113(b)(2)(A)(iv) of the Perkins Act requires a State to identify a core indicator to measure for its career and technical education students at the secondary level "student graduation rates (as described in Section 1111 (b)(2)(C)(vi) of the [ESEA])." Thus, a State must report the number or percent of its career and technical education students whom the State includes as graduated in its graduation rate described under the ESEA. To ensure that a State's schools are making AYP as required under Section 1111(b)(2)(A) of the ESEA, some States have established Statewide targets for graduation rates under Section 1111(b)(2)(C)(vi), and others States have defined AYP only to require improvement in the graduation rate each year.

It is the intent of the Division of Career Education to use the same information, processes, terminology, and reporting procedures currently used in Missouri for No Child Left Behind purposes. It is our intent to compare graduation rates and develop disaggregated reports comparing Missouri career and technical education and non-career and technical education populations. It is also our intent that the reports will have the same format as used for the Adequate Yearly Progress indicators in Missouri. The State Board of Education has approved proficiency standards for communication arts/reading and mathematics through the 2013-2014 school year.

Missouri uses the definition of graduation rate from the National Center for Education Statistics: The quotient of the number of graduates in the current year as of June 30 divided by the sum of the number of graduates in the current year as of June 30 plus the number of twelfth-graders who dropped out in the current year plus the number of eleventh-graders who dropped out in the preceding year plus the

number of tenth-graders who dropped out in the second preceding year plus the number of ninth-graders who dropped out in the third preceding year. Students who obtain a GED are counted as dropouts in this calculation.

The State Board of Education established the graduation rate of 85%. Schools will be considered as having met Annual Yearly Progress if they meet or exceed 85% or if they have made improvement from the previous year. The state graduation rates for the last three years are: 2003-2004, 85.5%; 2004-2005, 85.9%; and 2005-2006, 85.7%.

6. Describe the eligible agency's process for reaching agreement on local adjusted levels of performance if an eligible recipient does not accept the State adjusted levels of performance under Section 113(b)(3) of the Act and ensuring that the established performance levels will require the eligible recipient to continually make progress toward improving the performance of career and technical education students. [Sec. 113(b)(4)(A)(i)(II); sec. 122(c)(10)(B)]

Perkins IV requires States to negotiate with the local eligible recipients on levels of performance for the eight secondary indicators and the six postsecondary indicators. For three of these indicators (1S1 – Academic Attainment-Reading/Language Arts; 1S2 – Academic Attainment-Mathematics; and 4S1 – Student Graduation Rates) the performance levels are already established under No Child Left Behind and no negotiations will be conducted.

The local eligible recipient's previous performance will be used to establish their baseline. The baseline will be the rolling average performance of the three previous years when available. When the data are not available, the baseline will be the same as the state baseline (i.e., postsecondary retention and transfer.)

Local eligible recipients will not be allowed to negotiate an adjusted level of performance below its baseline. If the local eligible recipient is performing **above** the state baseline, the adjusted performance level will be to meet or exceed the three-year rolling average of performance. If the local eligible recipient is performing **below** the State baseline, the adjusted level of performance will be a minimum of a two-percentage point increase over the established baseline per year. The ultimate goal is to reach the State baseline.

7. Describe the objective criteria and methods the eligible agency will use to allow an eligible recipient to request revisions to its local adjusted levels of performance if unanticipated circumstances arise with respect to an eligible recipient. [Sec. 113(b)(4)(A)(vi)]

In the event of unanticipated circumstances, the eligible recipient can apply for a one-year waiver from the core indicators. The waiver or "hold-harmless" provision will be a placeholder and may be extended depending on the nature of the unanticipated circumstances. The waiver will be considered by the Division of Career Education's Administration and Accountability Services section. The criteria for a waiver includes:

• Recipient falling below the agreed upon level of performance;

- An unanticipated circumstance that can be documented that would have an impact on performance levels, such as natural disaster, epidemic, serious illness or death of a faculty member; or
- Local recipient has formally requested a change in performance levels to the Division of Career Education. If more than a one-year waiver is necessary, the State will evaluate the need to renegotiate the agreed upon levels of performance.
  - 8. Describe how the eligible agency will report data relating to students participating in career and technical education programs in order to adequately measure the progress of the students, including special populations and students participating in Tech Prep programs, if applicable, and how the eligible agency will ensure that the data reported from local educational agencies and eligible institutions, and the data that are reported to the Secretary, are complete, accurate, and reliable. [Sec. 122(c)(13); sec 205].

The timeline and format of the disaggregated career and technical education reports will be aligned to the extent possible with the Annual Yearly Progress (AYP) reports published by the Department of Elementary and Secondary Education. Examples of Missouri's Annual Yearly Progress format can be viewed at <a href="http://dese.mo.gov/divimprove/assess/AYP\_Grid.pdf">http://dese.mo.gov/divimprove/assess/AYP\_Grid.pdf</a>.

The appropriate staff members in the Divisions of Career Education and School Improvement will continue to meet to review the data elements for reliability and validity as they relate to programs, schools, and the state level.

The Division of Career Education continues to move from data collection and reporting for compliance to focus on program improvement.

9. Describe how the eligible agency plans to enter into an agreement with each consortium receiving a grant under Perkins IV to meet a minimum level of performance for each of the performance indicators described in Section 113(b) and 203(e) of the Act. [Sec. 204(e)(1)]

Individual recipients and consortiums are treated the same regarding the levels of performance. Each school district in a consortium will be required to submit data on the core indicators of performance and may negotiate separately on their levels of performance with their fiscal agent.

10. Describe how the eligible agency will annually evaluate the effectiveness of career and technical education programs, and describe, to the extent practicable, how the eligible agency is coordinating those programs with other Federal programs to ensure non-duplication. [Sec. 122(c)(8)]

The Division of Career Education has three opportunities to evaluate and provide technical assistance to local educational agencies, including career education programs.

# 1. Missouri School Improvement Program

The Missouri School Improvement Program (MSIP) has the responsibility of reviewing and accrediting the 524 school districts within a 5-year review cycle. The process of accrediting school districts is mandated by state law.

Districts are reviewed on a five-year cycle using three sets of standards which are designed to promote excellence in all Missouri public schools. These standards are resource, process, and performance. The resource standards address the basic requirements that all districts must meet and are quantitative in nature. The process standards address the instructional and administrative processes used in schools. The performance standards include multiple measures of student performance and include academic achievement, reading achievement, ACT achievement, career preparation, and educational persistence.

The final component of the MSIP process is the Comprehensive School Improvement Plan (CSIP) <a href="http://www.dese.mo.gov/divimprove/sia/msip/CSIP\_Manual.pdf">http://www.dese.mo.gov/divimprove/sia/msip/CSIP\_Manual.pdf</a>. The written CSIP directs the overall improvement of a district's educational programs and services.

As part of the MSIP process, the Division of Career Education requires all career education programs to complete the *Report for Local Program Quality Improvement*http://dese.mo.gov/divcareered/msip.htm. The report serves as a tool for school districts to use for program improvement and planning. Aligned with the *Common Standards for Career Education Programs* http://dese.mo.gov/divcareered/Common\_Program\_Standards.pdf, the report is used to review local career education programs to determine where exemplary programs and activities exist and where improvements should be made. Findings from the report are used in the district's CSIP for career education program improvement.

## 2. Perkins Technical Assistance Reviews

Each fiscal year, the Division of Career Education conducts Perkins Technical Assistance Visits (TAVs). The TAVs are completed for secondary, postsecondary, and Tech Prep programs. The primary purpose of the TAVs is to assess the eligible recipient's compliance with the provisions of the Perkins Act and to offer assistance in all areas of program administration. This is accomplished by reviewing the eligible recipient's financial and accountability records to ensure that the eligible recipients are spending Perkins dollars in an appropriate manner and have an accountability system in place to gather data as it relates to the Perkins core indicators of performance.

Prior to the TAV, the Division sends a letter to the eligible recipient informing them of the date of the visit, the Division staff attending the visit, and a general overview of the visit. The letter also references the *Required Documentation Sheet*. This sheet indicates the required documentation for the TAV. The eligible recipient is to use this document as a guide for preparing for the TAV.

Two areas of documentation are reviewed during the TAV:

#### Accountability Review

The intent is to verify that the Perkins data being reported to the Division of Career Education are consistent with the definitions for participants, concentrators, and completers.

Nontraditional participation/completion data are reviewed to determine if the students reported are consistent with the nontraditional programs identified by the Division of Career Education.

The eligible recipients are to describe the process used to gather placement data. Students that were not positively placed are to be reported as status unknown, not employed, or not available.

## Financial Review

A finance worksheet is utilized to document the review. This worksheet is divided into the following categories: records management, allowable costs, time and effort reporting, equipment, and miscellaneous. In addition, a finance interview questionnaire is completed with the eligible recipient.

The following documentation is reviewed for the prior two years and the current year:

- accounting records (financial reports, ledgers, accounts, etc.);
- requisitions, purchase orders, invoices, etc.;
- monthly time sheets;
- semi-annual time certifications;
- job descriptions;
- inventory records; and
- any additional financial information supporting the Perkins grant.

At the conclusion of the TAV, an exit conference is conducted with the eligible recipient. During the exit conference, Division staff provides an overview of the visit which consists of the areas that were reviewed and any concerns and/or best practices that were noted.

After returning to the Department, the Division staff compiles the information gathered from the TAV and prepares a final report of the review. The final report is comprised of two sections, accountability and financial. In each section of the report, any findings and corrective action necessary are identified. The final report is then sent to the eligible recipient with a cover letter. The letter basically thanks the eligible recipient for their courtesy, restates the purpose of the visit, and references the final report.

To document the TAV for the Perkins grant, the Division of Career Education maintains a central file to keep documentation from the review.

Division staff includes the following documentation in the file for each TAV:

- correspondence with the eligible recipient regarding the TAV;
- application, budget, and final expenditure report for the year(s) of the TAV;
- accountability data for the year(s) of the TAV;
- finance worksheet;
- interview questions and responses (accountability and finance);
- notes from TAV;
- copies of eligible recipient records that support any findings (if applicable);
- final report; and
- corrective action plan (if applicable).

If any findings and corrective actions are noted in the Perkins final report, the eligible recipient is required to submit, in writing, a corrective action plan (CAP) that addresses these issues. Therefore, within 45 business days of receipt of the Perkins final report, the eligible recipient must submit a detailed CAP, with timelines and persons involved, indicating the steps to be taken to address the findings and recommendations.

Division staff then reviews the CAP to ensure that the plan is sufficient and that all the findings have been adequately addressed. If acceptable, staff will include the CAP in the central file along with the other documentation for the eligible recipient. If not acceptable, Division staff will contact the eligible recipient for additional information and/or documentation.

Once the anticipated completion date for corrective action has occurred, Division staff will contact the eligible recipient to ensure that the corrective action has been implemented. This follow-up will be handled via a phone call or an e-mail. To verify that the CAP has been completed, the eligible recipient may be required to submit additional documentation to the Division. This documentation would be included in the central file with the other monitoring documentation. If additional documentation is not required, staff will document the follow-up with the eligible recipient and include it in the central file. In addition, during the eligible recipient's next Perkins TAV, the Division will review the findings with the eligible recipient and ensure the necessary corrective action has been properly implemented.

#### 3. High Schools That Work Technical Assistance Visits

Missouri is among 32 states that participate in the *HSTW* network. *HSTW* is an effort-based school improvement initiative founded on the conviction that most students can master rigorous academic and career/technical studies if school leaders and teachers create an environment that motivates students to make the effort to succeed. Currently, Missouri has 37 high schools and six area career centers that are participating in *HSTW*.

As part of the *HSTW* process, districts that are part of the network must undergo a Technical Assistance Visit (TAV) sometime during their first two full years of operation. The TAV is conducted by a team of professional educators, including Division staff, who are knowledgeable of the *HSTW* primary goals, key practices, and key conditions. The *HSTW* 

TAV determines the extent to which the school is currently implementing key, research-based practices, and has certain key conditions in place supporting improved student achievement. Other less formal technical assistance activities include onsite visits by program staff at the request of an individual school district or teacher. Division staff provides updates at professional teacher association meetings and conferences and regional program area meetings. There are also discussion lists on Division-sponsored listservs.

#### V. TECH PREP PROGRAMS

## A. Statutory Requirements

1. Describe the competitive basis or formula the eligible agency will use to award grants to tech-prep consortia. [Sec. 203(a)(1)]

The decision was made to maintain Tech Prep as a separate funding stream for Perkins IV. It was also decided to realign the Tech Prep consortiums with the 12 community college districts, thus consolidating from 15 consortiums to 12.

A formula consisting of three components will be used to distribute the Tech Prep funds. The three components of this formula are as follows:

1) From the total Tech Prep allocation, each consortium will receive a base amount of \$105,000;

Of the remaining total Tech Prep allocation:

- 40% will be distributed to each consortium based on a percentage of the total Tech Prep enrollment (secondary and postsecondary Tech Prep enrollment within the consortium divided by the total enrollment of all Tech Prep consortiums). For this component of the formula, there is a maximum allocation of \$50,000 per consortium.
- 3) 60% will be distributed to each consortium based on a percentage of total postsecondary Tech Prep enrollment (postsecondary Tech Prep enrollment within the consortium divided by the total enrollment of all Tech Prep consortiums). For this component of the formula, there is a maximum allocation of \$50,000 per consortium.

All 12 Tech Prep consortiums will meet the following qualifications before funding will be awarded:

- Establish a consortium with representation from one or more secondary and one or more postsecondary institutions (including four-year institutions offering baccalaureate degree where appropriate and feasible) or apprenticeship training programs within a service area and assure that participation by all public secondary schools is made available;
- Submit a 5-year strategic plan that describes how the consortium will function and establishes goals, objectives, activities, and timelines for the development of Tech Prep educational services and activities in the various technical education career fields.
- Designate a fiscal agent for the consortium and an individual responsible for the coordination and administration of the Tech Prep program.
  - 2. Describe how the eligible agency will give special consideration to applications that address the areas identified in Section 204(d) of the Act. [Sec. 204(d)(1)-(6)]

Missouri does not award funding to the 12 Tech Prep consortiums on a competitive basis. However, the items under Sec 204(d)(1)-(6) will be considered when approving the Tech Prep 5-year strategic plans.

3. Describe how the eligible agency will ensure an equitable distribution of assistance between urban and rural consortium participants. [Sec. 204(f)]

Missouri has divided the State into 12 Tech Prep consortiums that are aligned with the 12 community college districts. There are 443 comprehensive high school districts offering career education

programs. Every high school has been assigned a Tech Prep regional coordinator to assure Tech Prep is offered to every high school student who has an interest.

- 4. Describe how the eligible agency will ensure that each funded Tech Prep program.
  - (a) Is carried out under an articulation agreement between the participants in the consortium, as defined in Section 3(4) of the Act.

Each of the 12 Tech Prep consortiums is required to maintain a file for every Tech Prep student reported as a secondary/postsecondary enrollee. A signed articulation agreement (signature required of student, secondary institution, and the postsecondary institution) is maintained at the Tech Prep consortium. Institutional articulation agreements are to be reviewed every two years at a minimum.

The Division will conduct an onsite review of each of the 12 Tech Prep consortiums over the next two years. Six consortiums will be reviewed each year. One of the review criteria is to review every program/course institutional articulation agreement between each of the high school member schools within the consortium.

(b) Consists of a program of study that meets the requirements of Section 203(c)(2)(A)-(G) of the Act.

The Tech Prep consortiums will be responsible for facilitating the development and implementation of programs of study. See pages 8-11 of the Missouri State Plan for a complete description of the development and implementation of programs of study.

(c) Includes the development of Tech Prep programs for secondary and postsecondary education that meet the requirements of Section 203(c)(3)(A)-(D) of the Act.

Each of the 12 Tech Prep consortiums will be required to meet the No Child Left Behind secondary performance measures. Data will be collected via the Missouri Student Information System (MOSIS) for every identified Tech Prep secondary student. Tech Prep students will be expected to perform at the state-adjusted level of performance established for all secondary students.

As part of the 5-year strategic planning process, each Tech Prep consortium must identify "student performance" as one of the required goals. Next, the consortium will be able to define and select objectives to be applied to the student performance goal. Following this, the consortium will be able to define and select strategies to be applied to their objectives. The last section requires entry of action steps that apply toward the strategy selected.

Each of the 12 Tech Prep consortiums is required to maintain a file for every Tech Prep student reported as a secondary/postsecondary enrollee. A signed articulation agreement (signature required of student, secondary institution, and the postsecondary institution) is maintained at the Tech Prep consortium. Institutional articulation agreements are to be reviewed every two years at a minimum.

The courses that award credit at the secondary level should be identified in the institutional articulation agreement. The credits awarded by the postsecondary institution should be included in the institutional articulation agreement as well. Dual credit should be identified when applicable and each student earning dual credit will be reported to the state at the close of the reporting year.

Work-based or work-site learning experiences that award credit at the secondary level should be identified in the institutional articulation agreement. The credits awarded by the postsecondary institution should be included in the institution articulation agreement. Courses that are taught through distant learning or similar technologies should be identified when utilized.

- (d) Includes in-service professional development for teachers, faculty, and administrators that meets the requirements of Section 203(c)(4)(A)-(F) of the Act.
- (e) Includes professional development programs for counselors that meet the requirements of Section 203(c)(5)(A)-(F) of the Act.
- (f) Provides equal access to the full range of technical preparation programs (including pre-apprenticeship programs) to individuals who are members of special populations, including the development of tech-prep program services appropriate to the needs of special populations [Sec. 203(c)(6)].
- (g) Provides for preparatory services that assist participants in tech-prep programs [Sec. 203(c)(7)].

The Tech Prep 5-year strategic plan has a section entitled Additional Elements. Under Additional Elements, each consortium must address inservice professional development for teachers, faculty, administrators, and counselors. In addition, each consortium must address special populations and preparatory services. The Tech Prep consortiums must complete both secondary and postsecondary plans (See Appendix B, pages 98-117 of the Missouri State Plan for a copy of the secondary and postsecondary 5-year strategic plans).

## (h) Coordinates with activities under Title I. [Sec. 203(c)(8)].

The Department of Elementary and Secondary Education is in the process of developing a Department wide grant application known as the electronic Planning and electronic Grants System (ePeGS) which will include the Perkins Title I grant and the Tech Prep grant. The purpose of this system is to create a seamless planning and e-grants process for school districts, other educational institutions, and the Department so there is a consistent application process to provide information for budgets and school improvement planning. The goals of the project include:

- a cross-divisional planning process that meets State and Federal requirements, and
- a consolidated grant application process that integrates with the planning process to ensure the budget supports the plan and integrates with the allocation and payment of funds.

The Tech Prep 5-year strategic plan is the same as the strategic plan for Perkins Title I. This approach will allow for both Tech Prep and Perkins Title I to address the same goals, objectives, and strategies.

5. Describe how the state plans to enter into an agreement with each consortium receiving a grant under Perkins IV to meet a minimum level of performance for each of the performance indicators described in Sections 113(b) and 203(e) of the Act. [Sec. 204(e)(1)].

Secondary Tech Prep programs must meet indicators (1S1, 1S2, and 4S1) as established under No Child Left Behind. A baseline will be established for each consortium using a three-year average performance when available for all other indicators. When data are not available, the baseline will be the same as the state baseline. If a consortium does not accept the State's baseline, they may negotiate an adjusted level of performance. Consortiums will not be allowed to negotiate an adjusted level of performance below its baseline. If a consortium is performing above the state baseline, the adjusted performance level must meet or exceed their three-year rolling average. If a consortium is performing below the State baseline, the adjusted level of performance will be a minimum of a two-percentage point increase over the established baseline per year. The ultimate goal is to meet or exceed the State baseline.

## **B.** Other Department Requirements

1. Submit a copy of the local application form(s) used to award Tech Prep funds to consortia and a copy of the technical review criteria used to select winning consortia, if funds are awarded competitively.

See Appendix B, pages 98-117 of the Missouri State Plan for a copy of the secondary and postsecondary 5-year strategic plans. Since Tech Prep funds are not awarded on a competitive basis, there will be no separate criteria for selecting winning consortia. The criteria for review of Tech Prep 5-year strategic plans will be the same as the review criteria for the Perkins Title I 5-year strategic plans.

## VI. FINANCIAL REQUIREMENTS

## **A. Statutory Requirements**

1. Describe how the eligible agency will allocate funds it receives through the allotment made under Section 111 of the Act, including any funds that you choose to consolidate under Section 202(a) of the Act, will be allocated among career and technical education at the secondary level, or career and technical education at the postsecondary and adult level, or both, including the rationale for such allocation. [Sec. 122(c)(6)(A); Sec. 202(c)]

As required by the Act per Section 112 (a)( 1), 85 percent of the basic grant will be available under the provisions of Title I. The Department will distribute 72 percent of the 85 percent to secondary eligible recipients and 28 percent of the 85 percent to postsecondary eligible recipients.

Federal funds for career education are expended for secondary and postsecondary career education in Missouri. Excluding the large adult student enrollment, which does not receive Perkins funding, the career education student enrollment rates for secondary and postsecondary students indicates a 72/2 8 ratio over the past six years.

#### **Enrollment**

| Year    | Secondary     | <b>Postsecondary</b> | Total            |
|---------|---------------|----------------------|------------------|
| 2006-07 | 172,469 (74%) | 60,996 (26%)         | 233,465 (100%)   |
| 2005-06 | 157,538 (74%) | 56,375 (26%)         | 213,913 (100%)   |
| 2004-05 | 151,891 (72%) | 59,470 (28%)         | 211,361 (100%)   |
| 2003-04 | 149,353 (72%) | 57,991 (28%)         | 207,344 (100%)   |
| 2002-03 | 152,888 (71%) | 61,932 (29%)         | 214,820 (100%)   |
| 2001-02 | 139,553 (69%) | 62,701 (31%)         | 202,254 (100%)   |
|         | 923,692 (72%) | 359,465 (28%)        | 1,283,157 (100%) |

The funding distribution percentage will be reviewed each fiscal year, and if necessary, the Department will change the percentages to reflect the current enrollment rates.

2. Provide the specific dollar allocations made available by the eligible agency for career and technical education programs under Section 131(a)-(e) of the Act and how these allocations are distributed to local educational agencies, area career and technical education schools, and educational service agencies within the State. [Sec. 131(g); Sec. 202(c)]]

According to Section 131(a) of the Act, the distribution of funds to secondary school programs will be based on the following:

• 30% based on the number of individuals ages 5 through 17 who reside in the school district served by the local educational agency (\$3,843,681-estimated).

• 70% based on the number of individuals ages 5 through 17 who reside in the school district served by the local educational agency and are from families below the poverty level (\$8,968,589-estimated).

All secondary funds will be allocated to either area career centers or comprehensive high schools.

3. Provide the specific dollar allocations made available by the eligible agency for career and technical education programs under Section 132(a) of the Act and how these allocations are distributed to postsecondary institutions within the State. [Section 122(c)(6)(A); Sec. 202(c)]

According to Section 132(a) of the Act, the distribution of funds to postsecondary institutions will be based on the following:

• The number of individuals who are Pell Grant recipients and recipients of assistance from the Bureau of Indian Affairs enrolled in an approved career education program (\$4,982,549-estimated).

All postsecondary funds will be allocated to either postsecondary institutions or area career centers that offer postsecondary programs.

4. Describe how the eligible agency will allocate any of those funds among any consortia that will be formed among secondary schools, and how funds will be allocated among the members of the consortia, including the rationale for such allocation. [Sec. 122(c)(6)(B); Sec. 202(c)]

According to Section 131(c) of the Act, in order for a local educational agency to receive an allocation, it must generate a minimum allocation of \$15,000 and have career education programs of sufficient size, scope, and quality to be effective. Per Sections 131 (f)(1)(C) and 1 34(b)(6) of the Act, sufficient size, scope, and quality is defined as a full range of Department-approved career education programs, services, and activities provided by an eligible recipient that would provide training opportunities in four of the seven career education program areas:

- Agricultural Education
- Business Education
- Industrial Education
- Health Sciences Education
- Marketing and Cooperative Education
- Family and Consumer Sciences Education—Occupational Education
- Family and Consumer Sciences Education—Family-focused Education

In addition, the eligible recipient would provide supportive services that include student assessment, guidance, placement, and remedial academic support for all students, including members of special populations who are enrolled in career education provided by the eligible recipient.

A local educational agency may form a consortium with another local educational agency in order to meet the required minimum \$15,000 allocation amount, collectively; however, the criterion of size, scope, and quality must also be met, collectively. If a local educational agency does not meet the above-mentioned criteria and decides not to enter into a consortium, the allocation will remain at the state level and be reallocated to those local educational agencies which meet these requirements. Per Section 131 (f)(2) of the Act, funds allocated to a consortium shall be used only for purposes and programs that are mutually beneficial to all members of the consortium and can be used only for programs authorized under this title. Such funds may not be reallocated to individual members of the consortium for purposes or programs benefiting only one member of the consortium.

5. Describe how the eligible agency will allocate any of those funds among any consortia that will be formed among postsecondary institutions, and how funds will be allocated among the members of the consortia, including the rationale for such allocations. [Section 122(c)(6)(B); sec. 202(c)]

According to Sections 132(a)(3)(A) and 132(c)(1) of the Act, in order for a local educational agency to receive an allocation, it must generate a minimum allocation of \$50,000 and have career education programs of sufficient size, scope, and quality to be effective. Per Sections 1 32(a)(3)(A) and 1 34(b)(6) of the Act, sufficient size, scope, and quality is defined as a full range of Department-approved career education programs, services, and activities provided by an eligible recipient that would provide training opportunities in four of the seven career education program areas:

- Agricultural Education
- Business Education
- Industrial Education
- Health Sciences Education
- Marketing and Cooperative Education
- Family and Consumer Sciences Education—Occupational Education
- Family and Consumer Sciences Education—Family-focused Education

In addition, the eligible recipient would provide supportive services that include student assessment, guidance, placement, and remedial academic support for all students, including members of special populations who are enrolled in career education provided by the eligible recipient.

Per Section 132(a)(3)(A) of the Act, a local educational agency may form a consortium with other local educational agencies for the purposes of receiving funds under Title I of the Act. Such consortium shall operate joint projects that provide services to all postsecondary institutions participating in the consortium and are of sufficient size, scope, and quality to be effective. According to Section 132(a)(3)(B) of the Act, funds allocated to a consortium shall be used only for purposes and programs that are mutually beneficial to all members of the consortium and shall be used only for programs authorized under this title. Such funds may not be reallocated to individual members of the consortium for purposes or programs benefiting only one member of the consortium.

6. Describe how the eligible agency will adjust the data used to make the allocations to reflect any change in school district boundaries that may have occurred since the population and/or enrollment data was collected, and include local educational

agencies without geographical boundaries, such as charter schools and secondary schools funded by the Bureau of Indian Affairs. [Sec. 131(a)(3)]

Since the implementation of Perkins III, there have been no significant changes in school district boundaries in Missouri. The Department will review this data each fiscal year.

7. Provide a description of any proposed alternative allocation formula(s) requiring approval by the Secretary as described in Section 131(b) or 132(b) of the Act. At a minimum, provide an allocation run for eligible recipients using the required elements outlined in Section 131(a) and/or Section 132(a)(2) of the Act, together with an allocation run using the proposed alternative formula(s). Also, include a demonstration that the alternative secondary formula more effectively targets funds on the basis of poverty, as described in Section 131(b)(1) of the Act; and/or, in the case of an alternative postsecondary formula, a demonstration that the formula described in Section 132(a)(2) of the Act does not result in a distribution of funds to eligible recipients that have the highest numbers of economically disadvantaged individuals and that an alternative formula would result in such a distribution.

The Department will not seek approval for any alternative allocation formula(s).

### **B.** Other Department Requirements

1. Submit a detailed project budget, using the forms provided in Part B of

this guide. See completed Perkins IV Budget Forms, Part B.

2. Provide a listing of allocations made to consortia (secondary and postsecondary) from funds available under Sections 112(a) and (c) of the Act.

See Appendix C for the consortia allocations.

3. Describe the secondary and postsecondary formulas used to allocate funds available under Section 112(a) of the Act, as required by Section 131(a) and 132(a) of the Act.

### Secondary Formula

According to Section 131(a) of the Act, the distribution of funds to secondary school programs will be based on the following:

- 30% will be allocated to local educational agencies in proportion to the number of individuals ages 5 through 17, inclusive, who reside in the school district served by the local educational agency for the preceding fiscal year compared to the total number of individuals who reside in the school districts served by all local educational agencies in the State for the preceding fiscal year.
- 70% will be allocated to local educational agencies in proportion to the number of individuals ages 5 through 17, inclusive, who reside in the school district served by the local educational agency and are from families below the poverty level for the

preceding fiscal year compared to the total number of individuals who reside in the school districts served by all the local educational agencies in the State for the preceding fiscal year.

The Department will use the data provided to the Secretary by the Bureau of the Census for the purpose of determining eligibility under Title I of the Elementary and Secondary Education Act of 1965.

### Postsecondary Formula

According to Section 132(a) of the Act, the distribution of funds to postsecondary institutions will be based on the number of individuals who are Federal Pell Grant recipients and recipients of assistance from the Bureau of Indian Affairs who are enrolled in an approved career education program offered by the eligible institution in the preceding fiscal year compared to the total number of these individuals enrolled in these programs within the State for the preceding fiscal year.

4. Describe the competitive basis or formula to be used to award reserve funds under Section 112(c) of the Act.

The reserve funds will be allocated only to the secondary eligible recipients with high numbers of career and technical education students. The Department will utilize a formula based on career education student enrollment rates to distribute the reserve funds.

5. Describe the procedures used to rank and determine eligible recipients seeking funding under Section 112(c) of the Act.

See response to VI(B)(4) above.

6. Include a description of the procedures used to determine eligible recipients in rural and sparsely populated areas under Section 131(c)(2) or 132(a)(4) of the Act.

According to Section 131 (c)(2) of the Act, the eligible agency shall waive the minimum allocation requirement of \$15,000 in any case in which the local educational agency is located in a rural, sparsely populated area and demonstrates that the local educational agency is unable to enter into a consortium for purposes of providing activities under this part. This waiver request must be in writing, explaining the specific circumstances of the local educational agency and how the utilization of federal funds will be beneficial to the career education programs operated by the local educational agency, and be approved by the Department.

According to Section 132(a)(4) of the Act, the eligible agency may waive the allocation requirement to provide services to all postsecondary institutions participating in the consortium in any case in which the eligible institution is located in a rural, sparsely populated area. This waiver request must be in writing, explaining the specific circumstances of the eligible institution and how the utilization of federal funds will be beneficial to the career education programs operated by the eligible institution, and be approved by the Department.

### VII. EDGAR CERTIFICATIONS AND OTHER ASSURANCES

### A. EDGAR Certifications

- 1. Provide a written and signed certification that—
  - (a) The plan is submitted by the State agency that is eligible to submit the plan. [34 CFR 76.104(a)(1)]
  - (b) The State agency has authority under State law to perform the functions of the State under the program. [34 CFR 76.104(a)(2)]
  - (c) The State legally may carry out each provision of the plan. [34 CFR 76.104(a)(3)]
  - (d) All provisions of the plan are consistent with State law. [34 CFR 76.104(a)(4)]
  - (e) A State officer, specified by title in the certification, has authority under State law to receive, hold, and disburse Federal funds made available under the plan. [34 CFR 76.104(a)(5)]
  - (f) The State officer who submits the plan, specified by title in the certification, has authority to submit the plan. [34 CFR 76.104(a)(6)]
  - (g) The agency that submits the plan has adopted or otherwise formally approved the plan.  $[34\ CFR\ 76.104(a)(7)]$
  - (h) The plan is the basis for State operation and administration of the program. [34 CFR 76.104(a)(8)]

In carrying out the administrative responsibilities identified in the Act, the Department of Elementary and Secondary Education provides the certifications listed above. (See Appendix I for the signed EDGAR Certifications.)

### **B.** Other Assurances

1. Submit a copy of the State Plan to the State office responsible for the Intergovernmental Review Process if your State implements that review process under Executive Order 12372. [See 34 CFR Part 79]

Missouri submitted its State Plan to the Office of Administration for the Intergovernmental Review Process pursuant to Executive Order 12372. See Appendix D for a copy of the letter showing compliance of this requirement.

2. Provide a complete and signed ED Form 80-0013 for certifications regarding lobbying; [See 34 CFR Part 82. To download ED Form 80-0013, and the SF LLL Form (Disclosure of Lobbying Activities) referred therein, See: http://www.ed.gov/fund/grant/apply/appforms/appforms.html]

The signed Certification Regarding Lobbying is included in Appendix E.

3. Provide a complete and signed Assurance for Non-Construction Programs Form. [See http://www.ed.gov/fund/grant/apply/appforms/appforms.html]

The signed Assurances for Non-Construction Programs form is included in Appendix F.

4. Provide a signed assurance that the eligible agency will comply with the requirements of the Act and the provisions of the State Plan, including the provision of a financial audit of funds received under the Act which may be included as part of an audit of other Federal or State programs. [Sec. 122(c)(11)]

The Department will comply with the requirements of the Act and the provisions of the State Plan, including the provision of a financial audit of funds received under the Act which may be included as part of an audit of other Federal or State programs.

5. Provide a signed assurance that none of the funds expended under the Act will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the acquiring entity or the employees of the acquiring entity, or any affiliate of such an organization. [Sec. 122(c)(12)]

The Department will not expend any funds made available under the Act to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the acquiring entity or the employees of the acquiring entity or any affiliate of such an organization.

6. Provide a signed assurance that the State will waive the minimum allocation as required in Section 131(c)(1) in any case in which the local educational agency is located in a rural, sparsely populated area <u>or</u> is a public charter school operating secondary school career and technical education programs <u>and</u> demonstrates that it is unable to enter into a consortium for purposes of providing services under the Act. [Section 131(c)(2)]

The Department will waive the minimum allocation as required in Section 131(c)(1) of the Act in any case in which the local educational agency is located in a rural, sparsely populated area or is a public charter school operating secondary school career and technical education programs and demonstrates that it is unable to enter into a consortium for purposes of providing services under the Act.

7. Provide a signed assurance that the State will provide, from non-Federal sources for the costs the eligible agency incurs for the administration of programs under this Act, an amount that is not less than the amount provided by the eligible agency from non-Federal sources for such costs for the preceding fiscal year. [Sec. 323(a)]

The Department will provide, from non-Federal sources for the costs the eligible agency incurs for the administration of programs under the Act, an amount that is not less than the amount provided by the eligible agency from non-Federal sources for such costs for the preceding fiscal year.

8. Provide a signed assurance that the State and eligible recipients that use funds under this Act for in-service and pre-service career and technical education professional development programs for career and technical education teachers, administrators, and other personnel shall, to the extent practicable, upon written request, permit the participation in such programs of career and technical education secondary school teachers, administrators, and other personnel in nonprofit private schools offering career and technical secondary education programs located in the geographical area served by such eligible agency or eligible recipient. [Sec. 317(a)]

The Department and eligible recipients that use funds made available under the Act for in-service and pre-service career and technical education professional development programs for career and technical education teachers, administrators, and other personnel shall, to the extent practicable, upon written request, permit the participation in such programs of career and technical education secondary school teachers, administrators, and other personnel in nonprofit private schools offering career and technical secondary education programs located in the geographical area served by such eligible agency or eligible recipient.

9. Provide a signed assurance that, except as prohibited by State or local law, that an eligible recipient may, upon written request, use funds made available under this Act to provide for the meaningful participation, in career and technical education programs and activities receiving funds under this Act, of secondary school students attending nonprofit private schools who reside in the geographical area served by the eligible recipient. [Sec. 317(b)(1)]

Except as prohibited by State or local law, the eligible recipient may, upon written request, use funds made available under the Act to provide for the meaningful participation, in career and technical education programs and activities receiving funds under this Act, of secondary school students attending nonprofit private schools who reside in the geographical area served by the eligible recipient.

10. Provide a signed assurance that eligible recipients that receive an allotment under this Act will consult, upon written request, in a timely and meaningful manner with representatives of nonprofit private schools in the geographical area served by the eligible recipient regarding the meaningful participation, in career and technical education programs and activities receiving funding under this Act, of secondary school students attending nonprofit private schools. [Sec. 317(b)(2)]

The eligible recipients that receive an allotment under the Act will consult, upon written request, in a timely and meaningful manner with representatives of nonprofit private schools in the geographical area served by the eligible recipient regarding the meaningful participation, in career and technical education programs and activities receiving funding under this Act, of secondary school students attending nonprofit private schools.

#### B. Other Assurances:

- 1. The Department and eligible recipients will not use funds made available under the Act to provide career and technical education programs to students prior to the seventh grade, except that equipment and facilities purchased with funds under this Act may be used by such students.
- 2. The Department will meet the maintenance of fiscal effort requirements on either a per student or aggregate expenditure basis.
- 3. The Department and eligible recipients will not use funds made available under the Act to require any secondary school student to choose or pursue a specific career path or major.
- 4. The Department and eligible recipients will not use funds made available under the Act to mandate that any individual participate in a career and technical education program, including a career and technical education program that requires the attainment of a federally funded skill level, standard, or certificate of mastery.
- 5. The Department and eligible recipients will use funds made available under the Act in accordance with the Act.
- 6. The Department and eligible recipients will use funds made available under the Act to supplement, not supplant, non-Federal funds expended to carry out career and technical education activities and Tech Prep program activities.
- 7. The Department and eligible recipients will not use funds made available under the Act for the purpose of directly providing incentives or inducements to an employer to relocate a business enterprise from one State to another State if such relocation will result in a reduction in the number of jobs available in the State where the business enterprise is located before such incentives or inducements are offered.
- 8. The portion of any student financial assistance received under the Act that is made available for attendance costs shall not be considered as income or resources in determining eligibility for assistance under any other program funded in whole or in part with Federal funds.
- 9. Eligible recipients may use funds made available under the Act to pay for the costs of career and technical education services required in an individualized education program developed pursuant to Section 614(d) of the Individuals with Disabilities Education Act and services necessary to meet the requirements of Section 504 of the Rehabilitation Act of 1973 with respect to ensuring equal access to career and technical education.

May 12, 2008 Date

Tom Quinn, Assistant Commissioner Division of Career Education

# **PART B: BUDGET FORMS**

### PERKINS IV BUDGET TABLE - PROGRAM YEAR 2

(For Federal Funds to Become Available Beginning on July 1, 2008)

# I. TITLE I: CAREER AND TECHNICAL EDUCATION ASSISTANCE TO STATES

| A. Total Title I Allocation to the State  | \$ <u>23,261,201</u> |
|---|----------------------|
| B. Amount of Title II Tech Prep Funds to Be Consolidated with Title I Funds   | \$ <u> </u>          |
| C. Total Amount of Combined Title I and Title II Funds to be distributed under section 112 ( <i>Line A + Line B</i> )   | \$ <u>23,261,201</u> |
| D. Local Formula Distribution (not less than 85%) (Line C x 85%)  | \$ <u>19,772,021</u> |
| 1. Reserve (not more than 10% of Line D)  | \$ <u>1,977,202</u>  |
| a. Secondary Programs (10% of <i>Line D</i> ) \$ 1,9  | 77,202               |
| b. Postsecondary Programs ( <u>0</u> % of <i>Line D</i> ) \$  | 0                    |
| 2. Available for formula allocations ( <i>Line D minus Line D.1</i> )   | \$ <u>17,794,819</u> |
| a. Secondary Programs (72% of <i>Line D.2</i> )   | \$ <u>12,812,270</u> |
| b. Postsecondary Programs (28% of <i>Line D.2</i> )   | \$ <u>4,982,549</u>  |
| E. State Leadership (not more than 10%) ( <i>Line C x</i> <u>10</u> %)  | \$ <u>2,326,120</u>  |
| <ol> <li>Nontraditional Training and Employment (\$150,000)</li> <li>Corrections or Institutions (\$232,612)</li> </ol> |                      |
| F. State Administration (not more than 5%) (Line $C \times \underline{5}\%$ )   | \$ <u>1,163,060</u>  |
| G. State Match (from non-federal funds) <sup>1</sup>  | \$ <u>1,667,627</u>  |

1 <sub>TL</sub>

The eligible agency must provide non-Federal funds for State administration of its Title I grant in an amount not less than the amount it provided in the preceding year.

# PERKINS IV BUDGET TABLE - PROGRAM YEAR 2

(For Federal Funds to Become Available Beginning on July 1, 2008)

# II. TITLE II: TECH PREP PROGRAMS

| A. | Total Title II Allocation to the State  | \$ <u>2,177,835</u> |
|----|---|---------------------|
| В. | Amount of Title II Tech Prep Funds to Be Consolidated with Title I Funds                  | \$ <u> </u>         |
| C. | Amount of Title II Funds to Be Made Available For Tech-Prep ( <i>Line A less Line B</i> ) | \$ <u>2,177,835</u> |
| D. | Tech-Prep Funds Earmarked for Consortia   | \$ <u>2,049,718</u> |
|    | 1. Percent for Consortia (Line D divided by Line C) [94%]                                 |                     |
|    | 2. Number of Consortia <u>12</u>  |                     |
|    | 3. Method of Distribution ( <i>check one</i> ):   |                     |
|    | a. X Formula b. Competitive   |                     |
| E. | Tech-Prep Administration  | \$ 128,117          |
|    | 1. Percent for Administration   |                     |

(Line E divided by Line C)  $[\underline{6}\%]$ 

# PART C: ACCOUNTABILITY FORMS

### I. Student Definitions

### A. Secondary Level

**Participant** – A secondary student who has earned one or more credits in any Department-approved career and technical education program area.

**Concentrator** – A secondary student who has earned three or more units of credit in a sequence in a Department-approved career and technical education program area.

### **B.** Postsecondary Level

**Participant** – A postsecondary student who has earned one or more credits in any Department-approved career and technical education program area.

**Concentrator** – A postsecondary student who completes a minimum of 12 "academic" or career and technical education sequential credits in a Department-approved career and technical education program that terminates in a degree, certificate, or industry-recognized credential.

### C. Adult Level

**Participant** – An adult student who has earned 100 or more clock hours in any Department-approved career and technical education program area.

**Concentrator** – An adult student who completes a minimum of 500 clock hours in a Department-approved career and technical education program that terminates in a certificate or industry-recognized credential.

### D. Tech Prep Secondary

**Participant** – A student who is enrolled in at least a three sequential career technical education credit course/s grades 11 or 12. The student must be enrolled in a Tech Prep program and have an articulation agreement signed by (secondary education agency) (postsecondary education agency) (student). The articulation agreement must be a non duplicative sequence of training that leads to a two year

degree or two year program certificate.

**Concentrator** – In addition to the requirement of a Tech Prep participant the student will have <u>earned</u> three sequential CTE credits grades 11 or 12.

**Completer** – In addition to the requirement of a Tech Prep concentrator the student must have earned a high school diploma.

### E. Tech Prep Postsecondary

**Participant** – A student that has completed the secondary component of a Tech Prep program. The student must be enrolled in a postsecondary education component of a Tech Prep program and have an articulation agreement signed by (secondary education agency) (postsecondary education agency) (student). The articulation agreement must be a non duplicative sequence of training that leads to a two year degree or a two year program certificate.

**Concentrator** – In addition to the requirements of a Tech Prep participant the student must have <u>earned</u> a minimum of 12 academic or career and technical education sequential credits in a postsecondary component of a Tech Prep program or earned a minimum of 500 clock hours in a postsecondary education component of a clock hour Tech Prep program

**Completer** – In addition to the requirement of a Tech Prep concentrator the student must have earned an associate degree or a two year program certificate.

# II. FINAL AGREED UPON PERFORMANCE LEVELS FORM (FAUPL)

# A. SECONDARY LEVEL

| Column<br>1  | Column<br>2   | Column<br>3                                     | Column<br>4                    | Column<br>5                    | Column<br>6                    |
|--|---|---|--------------------------------|--------------------------------|--------------------------------|
| Indicator &<br>Citation  | Measurement<br>Definition   | Measurement<br>Approach                         | Baseline<br>(Indicate<br>Year) | Year One<br>7/1/07-<br>6/30/08 | Year Two<br>7/1/08-<br>6/30/09 |
| 1S1 Academic Attainment – Reading/Language Arts 1 13(b)(2)(A)(i) | Numerator: Number of CTE concentrators who score either proficient or advanced on the Communication Arts assessment and whose scores were included in the State's adequate yearly progress (AYP) computation and left secondary education during the reporting year.  Denominator: Number of CTE concentrators who took the Communication Arts assessment and whose scores were included in the State's AYP computation and left secondary education during the reporting year. | State and<br>Local<br>Administrative<br>Records | 2005-06<br>50.95%              | 51.00%                         | 59.20%                         |
| 1S2 Academic Attainment - Mathematics 1 13(b)(2)(A)(i)           | Numerator: Number of CTE concentrators who score either proficient or advanced on the mathematics assessment and whose scores were included in the State's adequate yearly progress (AYP) computation and left secondary education during the reporting year  Denominator: Number of CTE concentrators who took the Mathematics assessment and whose scores were included in the State's AYP computation and left secondary education during the reporting year.                | State and<br>Local<br>Administrative<br>Records | 2005-06<br>46.93%              | 45.00%                         | 54.10%                         |

| Column  | Column   | Column  | Column             | Column                                    | Column                                    |
|---|--|---|--------------------|---|---|
| Indicator &   | 2<br>Measurement   | 3<br>Measurement  | Baseline           | Year One                                  | 6<br>Year Two                             |
| Citation  | Definition   | Approach  | (Indicate<br>Year) | 7/1/07-<br>6/30/08                        | 7/1/08-<br>6/30/09                        |
| 2S1<br>Technical Skill<br>Attainment<br>1 13(b)(2)(A)(ii) | Numerator: Number of CTE concentrators who passed the technical skill assessments aligned with industry-recognized standards.  Denominator: Number of CTE concentrators who took the technical skill assessments aligned with industry-recognized standards. | Third party<br>assessments when<br>available                            | 2005-06<br>57.60%  | 59.60%                                    | 61.60%                                    |
| 3S1<br>Secondary School                                   | <b>Numerator:</b> Number of CTE concentrators who earned a high school diploma or GED during the reporting year.   | State and local administrative  | 2006-07            |   |   |
| Completion<br>1 13(b)(2)(A)(iii)(I-<br>III)               | <b>Denominator:</b> Number of CTE concentrators who left secondary education during the reporting year.  | records   | 94.66%             | 95.66%                                    | 96.00%                                    |
| 481   | <b>Numerator:</b> Number of CTE concentrators who graduate during the reporting year.  | State and Local   | 2005-06            | > 85% or if they                          | > 85% or if they                          |
| Student Graduation Rates                                  | <b>Denominator:</b> Number of CTE concentrators  | Administrative<br>Records   | 85%                | > 85% or ij iney<br>have made             | > 05% or ij iney<br>have made             |
| 1 13(b) (2)(A) (iv)                                       | who graduate <b>plus</b> the number of CTE concentrators who dropped out of school during the four (4) year reporting cycle.   |   |                    | improvement<br>from the<br>previous year. | improvement<br>from the<br>previous year. |
| 5S1<br>Secondary<br>Placement<br>1 13(b)(2)(A)(v)         | Numerator: Number of CTE concentrators who graduated or received a GED and were placed in postsecondary or advanced training, in the military or employment in the second quarter following the program year.  Denominator: Number of CTE concentrators      | State developed,<br>school administered<br>surveys/placement<br>records | 2006-07<br>92.50%  | 93.00%                                    | 93.50%                                    |
|   | who graduated or received a GED.   |   |                    |   |   |

| Column<br>1   | Column<br>2   | Column<br>3   | Column<br>4                    | Column<br>5                    | Column<br>6                    |
|---|---|---|--------------------------------|--------------------------------|--------------------------------|
| Indicator &<br>Citation                                       | Measurement<br>Definition   | Measurement<br>Approach   | Baseline<br>(Indicate<br>Year) | Year One<br>7/1/07-<br>6/30/08 | Year Two<br>7/1/08-<br>6/30/09 |
| 6S1<br>Nontraditional<br>Participation<br>1 13(b) (2)(A) (vi) | Numerator: Number of CTE participants from underrepresented gender groups enrolled in nontraditional career education programs. The student must have earned on (1) or more credits in a nontraditional career education program.  Denominator: Number of CTE students enrolled in nontraditional career education programs. The student must have earned one (1) or more credits in a nontraditional career education program. | State/local<br>administrative data                                      | 2006-07<br>29.90%              | 30.00%                         | 32.00%                         |
| 6S2<br>Nontraditional<br>Completion<br>1 13(b)(2)(A)(vi)      | Numerator: Number of CTE concentrators from the underrepresented gender groups who completed and graduated from a nontraditional program.  Denominator: Number of CTE concentrators who completed and graduated from a nontraditional program.  | State developed,<br>school administered<br>surveys/placement<br>records | 2006-07<br>28.18%              | 30.18%                         | 31.00%                         |

# III. FINAL AGREED UPON PERFORMANCE LEVELS FORM (FAUPL)

# B. POSTSECONDARY/ADULT LEVEL

| Column<br>1   | Column<br>2   | Column<br>3                               | Column<br>4                    | Column<br>5                    | Column<br>6                       |
|---|---|---|--------------------------------|--------------------------------|-----------------------------------|
| Indicator &<br>Citation   | Measurement<br>Definition   | Measurement<br>Approach                   | Baseline<br>(Indicate<br>Year) | Year One<br>7/1/07-<br>6/30/08 | Year<br>Two<br>7/1/08-<br>6/30/09 |
| 1P1<br>Technical Skill<br>Attainment<br>1 13(b)(2)(B)(i)            | Numerator: Number of CTE concentrators who passed the technical skill assessments aligned with industry-recognized standards.  Denominator: number of CTE concentrators who took the technical skill assessments aligned with industry-recognized standards.                                | Third party assessments<br>when available | 2006-07<br>67.00%              | 69.00%                         | 71.00%                            |
| 2P1<br>Credential,<br>Certificate, or Degree<br>1 13(b)(2) (B) (ii) | Numerator: Number of CTE concentrators who received an industry-recognized credential/certificate, a one-year or two-year program certificate, or a degree during the reporting year.  Denominator: Number of CTE concentrators who left postsecondary education during the reporting year. | State/local administrative data           | 2006-07<br>84.14%              | 85.14%                         | 86.14%                            |

| Column<br>1   | Column<br>2   | Column<br>3  | Column<br>4                    | Column<br>5                    | Column 6                          |
|---|---|--|--------------------------------|--------------------------------|-----------------------------------|
| Indicator &<br>Citation   | Measurement<br>Definition   | Measurement<br>Approach  | Baseline<br>(Indicate<br>Year) | Year One<br>7/1/07-<br>6/30/08 | Year<br>Two<br>7/1/08-<br>6/30/09 |
| 3P1<br>Student Retention or<br>Transfer<br>1 13(b)(2) (B) (iii) | Numerator: Number of CTE concentrators who remained enrolled in their original postsecondary institution or transferred to another two- or four-year postsecondary institution during the reporting year and who were enrolled in postsecondary education in the previous reporting year.  Denominator: Number of CTE concentrators who were enrolled in postsecondary education in the previous reporting year who did not earn an industry-recognized credential/certificate, a one-year or two-year program certificate, or a degree in the previous reporting year. | State/local administrative data                                    | 2006-07<br>70.00%              | 70.00%                         | 70.00%                            |
| 4P1<br>Student Placement<br>1 13(b)(2)(B)(iv)                   | Numerator: Number of CTE concentrators who were placed or retained in employment, or placed in military service or apprenticeship programs in the second quarter following the program year in which they left postsecondary education.  Denominator: Number of CTE concentrators who left postsecondary education during the reporting year.   | State developed school<br>administered<br>surveys/placement record | 2006-07<br>61.00%              | 62.00%                         | 65.00% Agree                      |

| Column<br>1  | Column 2  | Column<br>3  | Column<br>4                    | Column<br>5                    | Column 6                          |
|--|---|--|--------------------------------|--------------------------------|-----------------------------------|
| Indicator &<br>Citation                                | Measurement Definition  | Measurement<br>Approach  | Baseline<br>(Indicate<br>Year) | Year One<br>7/1/07-<br>6/30/08 | Year<br>Two<br>7/1/08-<br>6/30/09 |
| 5P1<br>Nontraditional                                  | <b>Numerator:</b> Number of CTE participants from underrepresented gender groups enrolled in nontraditional career education programs. The  | State/local administrative data                                      | 2006-07                        |                                |                                   |
| Participation<br>1 13(b) (2) (B) (v)                   | student must have earned one (1) or more credits in a nontraditional career education program.  Denominator: Number of CTE students enrolled in nontraditional career education programs. The student must have earned one (1) or more credits in a nontraditional career education program.            |  | 29.90%                         | 30.00%                         | 32.00%                            |
| 5P2<br>Nontraditional<br>Completion<br>113(b)(2)(B)(v) | Numerator: Number of CTE concentrators from underrepresented gender groups who completed a program that leads to employment in the nontraditional field.  Denominator: Number of CTE concentrators who completed a program that leads to employment in nontraditional fields during the reporting year. | State developed, school<br>administered<br>surveys/placement records | 2006-07<br>21.00%              | 22.00%                         | 22.50%                            |